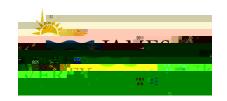
WHS-PRO-GUI-010f



#### Intent

This document forms a part of the laboratory safety series and outlines the base guidelines for spill management in laboratories and workshops to assist laboratory and workshop users in chemical and biological spill management in James Cook University (JCU) facilities.

#### Scope

The requirements of this guideline are mandatory for safe spill management and to ensure the safety of persons, JCU facilities and the environment when stored in a general space identified as:

- A laboratory;
- Associated storerooms or spaces which are support areas to the laboratory; and
- Should be applied where other locations that are not laboratories have equipment or processes mentioned within this guideline. Such examples would be fuel storage.

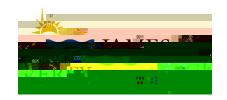
This guideline applies to all JCU employees, adjuncts, students, visitors, volunteers and contractors conducting activities associated with laboratories for the purpose of:

- Research;
- Teaching;
- Study;
- Maintenance or construction and/or
- Cleaning.

This guideline does not apply to JCU Controlled Entities. The Controlled Entities must ensure its function as a contained

Corrosive Substances	Substances that, by chemical action, will cause severe damage when in contact with living tissue, or in the case of leakage, will materially damage, or even destroy, other goods or the means of transport. Such substances
	are listed as Class 8 corrosive substances in the ADG Code as per AS 3780-2008.
Laboratory	Space identified by JCU Estate Directorate and the relevant Division as a laboratory.
Laboratory	Person nominated as in control of the laboratory by the Division, or College
Supervisor	management. This will be a member of staff.
Risk	The likelihood that harm will occur when exposed to a hazard and consequence of that harm (death, injury or illness).
Risk Assessment	A systematic process of evaluating the potential risks that may be involved in a projected activity or undertaking.
Risk Analysis	Process to understand the nature of the work health and safety risk and determine the level of risk.
Supervisor	Any person who is responsible for Workers, the allocation of tasks to Workers and / or the oversight of all JCU students during teaching and / or learning activities including field trips.

#### WHS-PRO-GUI-010f



Worker	A person who carries out work in any capacity for JCU, and includes working as: an employee a volunteer an apprentice or trainee a student gaining work experience (paid or unpaid) a contractor or subcontractor and their employees labour hire company employees assigned to work for JCU.
Workplace	A workplace is the place where work is carried out for JCU and includes any place where a Worker goes, or is likely to be, while at work.
Workshop	Space identified by JCU Estate Directorate and the relevant Division as a Workshop.

#### **Table of Contents**

1	Duty	Obligations and Responsbilities	2
	1.1	James Cook University	2
	1.2	College Managers / Directors / Managers / Operations Managers of Divisions	3
	1.3	Workers	3
	1.4	Research Students	3
	1.5	Laboratory and Academic Supervisors	3
	1.6	Work Health and Safety (WHS) Unit	4
2	Spill	Kits	4
	2.1	Spillage Containment	4
	2.2	Spill Management	4
	2.3	Spill Kits	4
	2.3.1	Absorbents / Neutralisers	4
	2.3.2	Personal Protective Equipment (PPE)	5
	2.3.3	Clean up material	5
3	Exan	nples of Specific Spill Kits	5
	3.1	Biohazardous Spill Kit	5
3.2		Cytotoxic Spill Kit	6
	3.3	Mercury Spill Kit	6
4	Tabu	lated Spill Kit Neutralisers & Additional Information	6

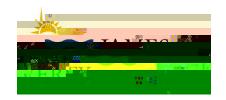
## 1 Duty Obligations and Responsibilities

## 1.1 James Cook University

JCU is responsible for:

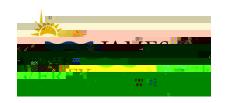
• Maintaining laboratories to the minimum standard that is outlined in the relevant Australian Standards and managing spills.

WHS-PRO-GUI-010f



• Universal Spill Absorbent: 1:1:1 mixture of Flor-

WHS-PRO-GUI-010f



#### 3.2 Cytotoxic Spill Kit

#### Kit inclusions:

- Disposable face mask / eye protection fluid-shield;
- Half face respirator mask and P2 ABE1 cartridge set;
- Chemical safety goggles;
- Single use disposable nitrile gloves, (inner level protection) 2 pairs;
- Single use long cuff heavy-duty nitrile gloves, (outer level protection) 2 pairs;
- Disposable laminated plastic full body overalls, 2 units, 1 x medium & 1 x large;
- Protective over shoe covers (non skid), 2 pairs;
- 1 scooper and scraper, 1 set;
- · Absorbent cleaning cloths, 2 units;
- Lilac cytotoxic waste bags with ties, 2 units;
- Unisafe absorbent powder, 2 x 100gm unit, absorbs in excess of 2.5 litres;
- Virkon, Trigene, 70% Ethanol disinfectant;
- Cytotoxic waste bins, well marked, comply to Australian Standards.

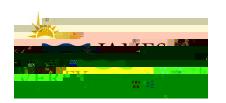
#### 3.3 Mercury Spill Kit

#### Kit inclusions:

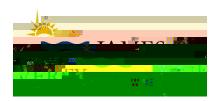
- Disposable face mask / eye protection fluid-shield;
- Half face respirator mask and P2 ABE1 cartridge set;
- · Chemical safety goggles;
- Single use disposable nitrile gloves, (inner level protection) 2 pairs;
- Single use long cuff heavy-duty nitrile gloves, (outer level protection) 2 pairs;
- Disposable laminated plastic full body overalls, 2 units, 1 x medium & 1 x large;
- Protective over shoe covers (non skid), 2 pairs;
- 1 scooper and scraper, 1 set;
- · Absorbent cleaning cloths, 2 units;
- Lilac cytotoxic waste bags with ties, 2 units;
- Unisafe absorbent powder, 2 x 100gm unit, absorbs in excess of 2.5 litres;
- Virkon, Trigene, 70% Ethanol disinfectant;
- Cytotoxic waste bins, well marked, comply to Australian Standards.

It is advisable to buy a commercial kit for Mercury spill kits.

# 4 Tabulated Spill Kit Neutralisers & Additional Information

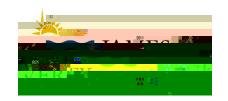


Cleaning Items	Scooper and scraper.		
Absorbents/	See specific areas below;		
Neutralisers /	Provide appropriate supply for quantity that could be spilled.		
Disinfectant			
GENERAL SPILLS			
Absorbents	Universal – pads, booms, pillows, vermiculite, granular, and loose sorbents.		
Additional	These universal/commercial absorbents may I	be used for most liquid chemical	
Information	spills;		
	Check the product label or other manufacturer's information for recommended		
	uses and compatibility.		
PPE	A P2 dust mask/ABEK chemical cartridges wil	I apply to the majority of acids,	
	bases, organics and aerosol;		
	HG filter for large quantities of mercury;		
CODDOCIVES Aside	P2 for biological spills.		
CORROSIVES – Acids		Common and an autorities and	
Neutralisers	Weak bases	Commercial neutralizers	
	Sodium carbonate (soda ash); Sodium bicarbonate;	Ensure that commercial brought products are suitable	
	Calcium carbonate.	for purpose against the SDS.	
Additional	Okay to neutralize	Do not neutralize	
Information	Hydrochloric acid;	Acids that contain heavy	
momation	Sulfuric acid:	metals;	
	Nitric acid;	Oxidizing acids such as	
	Phosphoric acid;	chromic acid, perchloric	
	WARNING: DO NOT USE PAPER TOWELS	acid, and fuming nitric	
	OR SAWDUST TO CLEAN OXIDISING	acid.	
	ACID SPILLS;		
	The safety data sheet must always be		
	consulted when dealing with these types of		
	spills. In particular the hazards of the		
	chemical (including acute and chronic health		
	effects), reactivity information, safety precautions for handling and specific		
	information for dealing with spills.		
PPE	Gloves example PVC, Viton butyl;		
	<ul> <li>P2 respirator.</li> </ul>		
CORROSIVES – Base			
Neutralisers	Weak acids	Commercial neutralizers	
Neutransers	Citric acid;	Ensure that commercial	
	Sodium bisulfate;	brought products are suitable	
	Dilute acetic acid (vinegar);	for purpose against the SDS.	
	For small spillages of acids use dry sand or	ioi pai pood againet iiie 02 0.	
	carbonate to contain spill;		
	The area should be flushed with water but not		
	to the extent that the spillage is spread		
	unnecessarily;		
	Neutralise an acid with sodium bicarbonate		
225	by sprinkling generously over spill.		
PPE	Gloves example PVC, Viton butyl, nitrile;		
	P2 respirator.		
FLAMMABLE LIQUIDS	Activated charcoal;		
Absorbents	Soda ash (sodium bicarbonate) to sprinkle libe	erally over the spill. If necessary	
	wear a P1 mask to avoid breathing soda ash of		



Additional Information	Absorbents reduce vapour level; Degree of flash point reduction depends on quantity used. Refer to manufacturer's directions; Absorbents may also be used for other toxic, noxious liquids such as carbon tetrachloride and chloroform; Do not use these absorbents with oxidizing liquids.	
PPE	ABEK1 chemical filter on respirator if potential for large spills.	

WHS-PRO-GUI-010f



### Schedules/Appendices

Work Health and Safety Act 2011

Work Health and Safety Regulation 2011

Managing Risks of Hazardous Chemicals in the Workplace Code of Practice 2013

How to Manage Work Health and Safety Risks Code of Practice 2011