

# **Managing Chemicals**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Standard
  - 3.1 Identifying Chemicals | 3.2 Acquiring and Transferring in Chemicals | 3.3 Risk Assessing Chemicals |
  - 3.4 Maintaining a Chemical Inventory | 3.5 Handling, Using and Disposing of Chemicals | 3.6 Transporting Chemicals sub-heading | 3.7 Managing Regulated Chemicals | 3.8 Managing Chemical Incidents and Emergencies | 3.9 Health Monitoring
- 4.0 Definitions
- 5.0 Information
- 6.0 Related policy documents and supporting documents

### 1.0 Purpose

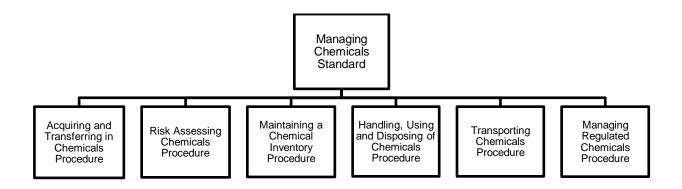
This standard outlines the mandatory requirements for safe and effective management of chemicals at Griffith University. The procedure aims to minimise risks to personnel and property and ensure continuing legislative compliance.

### 2.0 Scope

This standard applies to all staff, students, contractors and other relevant persons engaged by Griffith University that procure, use, store and dispose of chemicals as part of their work, research or study. It encompasses all aspects of chemicals management, except for managing asbestos, biological or radioactive materials (refer to specific procedures for these hazards).

### 3.0 Standard

The following procedures underpin this standard and prescribe the methods for chemical safety management processes.



**Note**: The terms Hazardous Chemicals Register, Chemical Register and Manifest are used interchangeably at Griffith and refer to the 'Manifest' recorded in Chemwatch. This document uses Chemical Register unless referencing a specific legislative requirement.



### 3.1 Identifying Chemicals

#### Chemical Custodians must:

- obtain a copy of a compliant Safety Data Sheet (SDS) before acquiring a chemical
- use the SDS to identify the classification and category applicable of the chemical to be used.

### 3.2 Acquiring and Transferring in Chemicals

#### Chemical Custodians must:

- When purchasing chemicals:
  - o purchase through Griffith Marketplace, considering sustainable vendors
  - o follow the **Special Approvers Guideline** when this is not possible.
- When acquiring and transferring in chemicals:
  - review the SDS and provide a copy to the approver
  - o attain necessary permits and licenses
  - do not exceed maximum allowable quantities
  - o only order the minimum amount needed for time-sensitive chemicals
  - o verify appropriate storage facilities are available
  - o provide a copy of any individual permits to crs@griffith.edu.au.
- When receiving chemicals:
  - secure containers to prevent unauthorised access, accidental breakage, and spills
  - update the Chemical Register for the area within two business days of receiving the chemicals
  - o mark all time-sensitive chemicals immediately with an expiration date upon receipt.

### 3.3 Risk Assessing Chemicals

#### Chemical Custodians must:

- conduct a risk assessment for work to be undertaken involving chemicals before use, that meets
  the requirements of the Risk Assessing Chemicals procedure
  - when using chemicals listed in Schedule 14 of the WHS Regulation, conduct a risk assessment that specifically assesses whether the chemical poses a significant risk
- identify and prioritise treatment plans following the hierarchy of controls
- review the Risk Assessment at the frequencies defined in the same procedure.

### 3.4 Maintaining a Chemical Inventory

#### Chemical Custodians must:

- maintain a Chemical Register in Chemwatch using the Manifest function
- update the register when:
  - o introducing new products or quantities to the location



- discontinuing the use of a chemical.
- Review the register:
  - o for high-hazard spaces at a frequency based on risk
  - o at a minimum, annually for all other spaces.
- do not exceed the maximum allowable quantities of chemicals outlined in Schedule 11 of the WHS Regulation
- maintain an accurate inventory of all regulated and high-risk chemicals
- where major chemical stores and minor mixed chemical stores are within the scope of responsibility, audit the stored quantities at least monthly.

The Health and Safety Chemical and Radiation Specialist Team must:

- review the manifest quarterly or when there is a known change to chemical quantities or locations, and
- if the quantity of Schedule 11 hazardous chemicals exceeds the allowable amounts:
  - o request the remediation of quantities or assess the need for a licence from the Regulator
  - develop a specific emergency plan in consultation with the work group and the Health and Safety Partner
  - facilitate notification to the Regulator as the quantities decrease below the allowable amounts.

Laboratory Managers, Clinic Managers, Workshop Managers must:

- unless specifically negotiated, keep a copy of the Schedule 11 Manifest at the main entry to the building in a signed Hazchem cabinet
- install outer warning and information placards where required and in the correct format as required by the WHS Regulation.

### 3.5 Handling, Using and Disposing of Chemicals

Chemical Custodians must:

- only conduct chemical work in a laboratory or workshop that includes:
  - emergency showers and eye wash stations that conform to AS 4775-2007
  - appropriate fire extinguishers must also be available in spaces that contain flammable chemicals.
- verify a risk assessment was completed and approved before commencing any work involving chemicals
- when labelling chemicals:
  - follow the Globally Harmonized System (GHS) and Schedule 9 of the WHS Regulation
  - o date all chemicals on the label to assist with monitoring degradation
  - o remove unlabelled chemicals from use and storage and dispose of them as chemical waste.
- when storing chemicals:
  - ensure legislative requirements are met for the class and category of chemicals



- o ensure permit conditions, licence conditions the risk assessment treatment plan is followed
- do not store chemicals in personal lockers, desks or offices
- always store chemicals in appropriate storage cabinets
- only store temperature-sensitive chemicals in a manner to ensure they remain safe and stable
- only store prohibited and restricted carcinogens, scheduled drugs and poisons and chemicals of security concern in secure and lockable locations
- o do not give access to unauthorised persons under any circumstances
- establish the exclusion zones for hazardous areas as defined in the assessment.
- when disposing of chemicals:
  - do not deliver waste to the chemical stores without first getting approval from crs@griffith.edu.au. Any high hazard chemicals may be required to remain in the current workspace until the day of waste collection to minimise risk
  - ensure they are disposed of on time and using the method prescribed by labelling and risk assessment
  - seal all chemicals to be disposed of in its original container or a clearly labelled, appropriate and compatible container.
- when vacating a laboratory:
  - complete the Laboratory Demobilisation Checklist
  - remove all legacy chemicals.

Laboratory Managers, Clinic Managers, Workshop Managers must:

- ensure chemical custodians are:
  - managing their chemicals in accordance with this standard the Handling, Using and Disposing of Chemicals procedure
  - collaborate and cooperate with other facility work groups to ensure understanding of all chemicals in the facility.
- label or signpost any pipes and reticulated services containing chemicals or dangerous goods to identify the contents
- ensure specialised storage facilities conform to the relevant Australian Standards
- store bulk chemicals securely and with bunding to prevent any damage to containers or release
- keep a register of all personnel inducted and authorised to access areas where regulated chemicals are stored.

#### 3.6 Transporting Chemicals

Chemical Custodians must:

- when transferring chemicals from one laboratory or work area to another:
  - update ChemWatch immediately to ensure accurate chemical stock recording
  - o update the risk assessment to ensure the new storage location is adequate and appropriate
- not move prohibited and restricted carcinogens from their approved area



- when transporting cryogenic liquids and asphyxiants, ensure they are contained in the following:
  - closed but vented Dewars, or
  - closed but vented vacuum flasks
- only transport cryogenic liquids and asphyxiants in open-type vehicles such as utility vehicles, trailers or tray trucks
- maintain segregation of incompatible chemicals by moving them at different intervals or using separate secondary containment vessels.

### 3.7 Managing Regulated Chemicals

#### Chemical Custodians must:

- maintain an accurate stock inventory of chemicals of security concern
- report any unexplained losses of the chemicals to the Health and Safety team as soon as possible.

The Health and Safety Chemical and Radiation Specialist Team must:

- review the Griffith University Substance Management Plan annually or where there is a trigger for change
- keep a register of all High-Risk Poisons
- maintain oversight over the total inventory of chemicals of security concern for Griffith.

### 3.8 Managing Chemical Incidents and Emergencies

#### All personnel must:

- report all chemical incidents where there is:
  - o actual harm or the potential for harm to people and the environment
  - any unexplained loss of a chemical of security concern
- for any serious incidents such as fire, explosion, serious injury or fatality, contact external emergency services immediately (phone 000), followed by notification to Campus Support
- call Campus Support immediately in the following circumstances:
  - a significant spill of a toxic chemical
  - the uncontrolled release of gas through a reticulated service (confirmed or suspected), or
  - where a spill creates a fire hazard
- refer to the Griffith University Emergency Management Plan when planning for and responding to all emergency situations.

#### Chemical Custodians must:

 before commencing work involving chemicals, verify all necessary emergency training, processes and equipment as defined in the risk assessment is available and readily accessible if an emergency arises.

Laboratory Managers, Clinic Managers, Workshop Managers must:

 where licences approve increased quantities of Schedule 11 hazardous chemicals, develop a local emergency response plan for the approved locations.



The Health and Safety Chemical and Radiation Specialist Team must:

 where external emergency services require a manifest, prepare a manifest that meets the requirements of Schedule 12 of the WHS Regulation.

### 3.9 Health Monitoring

The Health and Safety Chemical and Radiation Specialist Team must:

 review Chemwatch, chemical risk assessments and chemical dealings to identify where personnel have potential exposure to airborne contaminants or Schedule 14 Hazardous Chemicals. Conduct this review every quarter.

The HSW Health and Wellbeing Team must:

- where assessments identify significant risks, review the health monitoring requirements against the Health Monitoring Guide for Persons Conducting a Business or Undertaking (Qld) to verify the monitoring activities to conduct
- identify how the health monitoring activities will be conducted
- maintain records of health monitoring activities, including:
  - the Product Name
  - the location and work processes involved
  - the personnel involved in the work that requires health monitoring
  - o the type of health monitoring activity required.

### 4.0 Definitions

**ADG Code** is the Australian Code for the Transport of Dangerous Goods by Road and Rail, in its current form, approved by the Australian Transport Council. The ADG Code is accessible at the National Transport Commission website.

**Chemicals** are any substance that has a defined composition.

**Chemical Custodians** are personnel with operational control over chemicals at Griffith. This includes users of the chemicals, chief investigators and their supervisor.

**Chemical Register** is a 'hazardous chemical register' as defined by the WHS Regulation, and at Griffith is using the 'manifest' function in Chemwatch.

**GHS** refers to the 'Globally Harmonized System of Classification and Labelling of Chemicals', in its current form and published by the United Nations.

**Hazardous Chemical** means a substance, mixture or article that satisfies the criteria for a hazard class in the GHS (including a classification referred to in Schedule 6 of the WHS Regulation).

**Label** means written, printed or graphical information elements concerning a chemical that is affixed to, printed on, or attached to the container of a hazardous chemical.

SDS refers to a safety data sheet prepared under Section 330 or 331 of the WHS Regulation.

WHS Regulation refers to the Work Health and Safety Regulation 2011 (Qld).



### 5.0 Information

Title	Managing Chemicals Standard
Document number	2023/0001044
Purpose	This standard outlines the mandatory requirements for safe and effective management of chemicals at Griffith University. The procedure aims to minimise risks to personnel and property and ensure continuing legislative compliance.
Audience	Staff
Category	Operational
Subcategory	Safety
Goale (SDGe)	This document aligns with Sustainable Development Goals: 3: Good Health and Well-Being 12: Responsible Consumption and Production
Approval date	18 December 2023
Effective date	18 December 2023
Review date	18 December 2028
Policy advisor	Associate Director, Health and Safety Standards and Assurance
Approving authority	Director, Health and Safety

## **6.0 Related Policy Documents and Supporting Documents**

Legislation Work Health and Safety Act 2011 (Qld)

Work Health and Safety Regulation 2011 (Qld)



	Australian Dangerous Goods (ADG) Code
	Medicines and Poisons Act 2019 (Qld)
	Medicines & Poisons (Poisons & Prohibited Substances) Regulation 2021 (Qld)
	Therapeutic Goods (Poisons Standard—July 2023) Instrument 2023 (Cwlth)
	National Code of Practice for Chemicals of Security Concern 2016 (Cwlth)
Policy	Health, Safety and Wellbeing Policy
Procedures	Acquiring and Transferring in Chemicals Procedure
	Risk Assessing Chemicals Procedure
	Maintaining a Chemical Inventory Procedure
	Handling, Using and Disposing of Chemicals Procedure
	Transporting Chemicals Procedure
	Managing Regulated Chemicals Procedure
	Special Approvers Guideline
	Griffith University Substances Management Plan
Local Protocol	Managing Chemical Incidents and Emergencies Protocols
Forms	Laboratory Demobilisation Checklist