

Biosafety Procedure



1 Purpose

To set out the processes by which the University manages the use of biological materials.

2 Scope

This Procedure applies to all University Members and Students conducting work with biological materials or accessing spaces where biological activities occur.

This Procedure excludes biological activities for on-campus healthcare facilities.

Biological activities include the use of biological materials within teaching and Research Activities as follows (but is not limited to):

- Biological materials such as plants, seeds, soil, Animals, and microorganisms
- Genetically Modified Organisms (GMO)
- Materials derived from human and Animal sources
- Toxins from both live Animals and synthesised toxins/biologicals
- Security Sensitive Biological Agents (SSBA)
- Defence biologicals
- Imported or exported biologicals and buffers
- Biologicals with restricted use under The Department of Agriculture, Water and the Environment (DAWE)
- Live and dead Animal tissues and associated pathogens
- Any other biosecurity risk material.

For a list of Physical Containment (PC) spaces where biological activities occur, refer to Safety Central. Biological activities may also occur at external locations during fieldwork.

3 Procedure Overview

This procedure defines the approvals process, access rules, standard work practices, training, cleaning, emergency, reporting, waste, storage, transport, immunisation, facility commissioning, inspection and audit requirements for biological activities and PC spaces.

4 Procedures

4.1 Duty, Obligations and Responsibilities

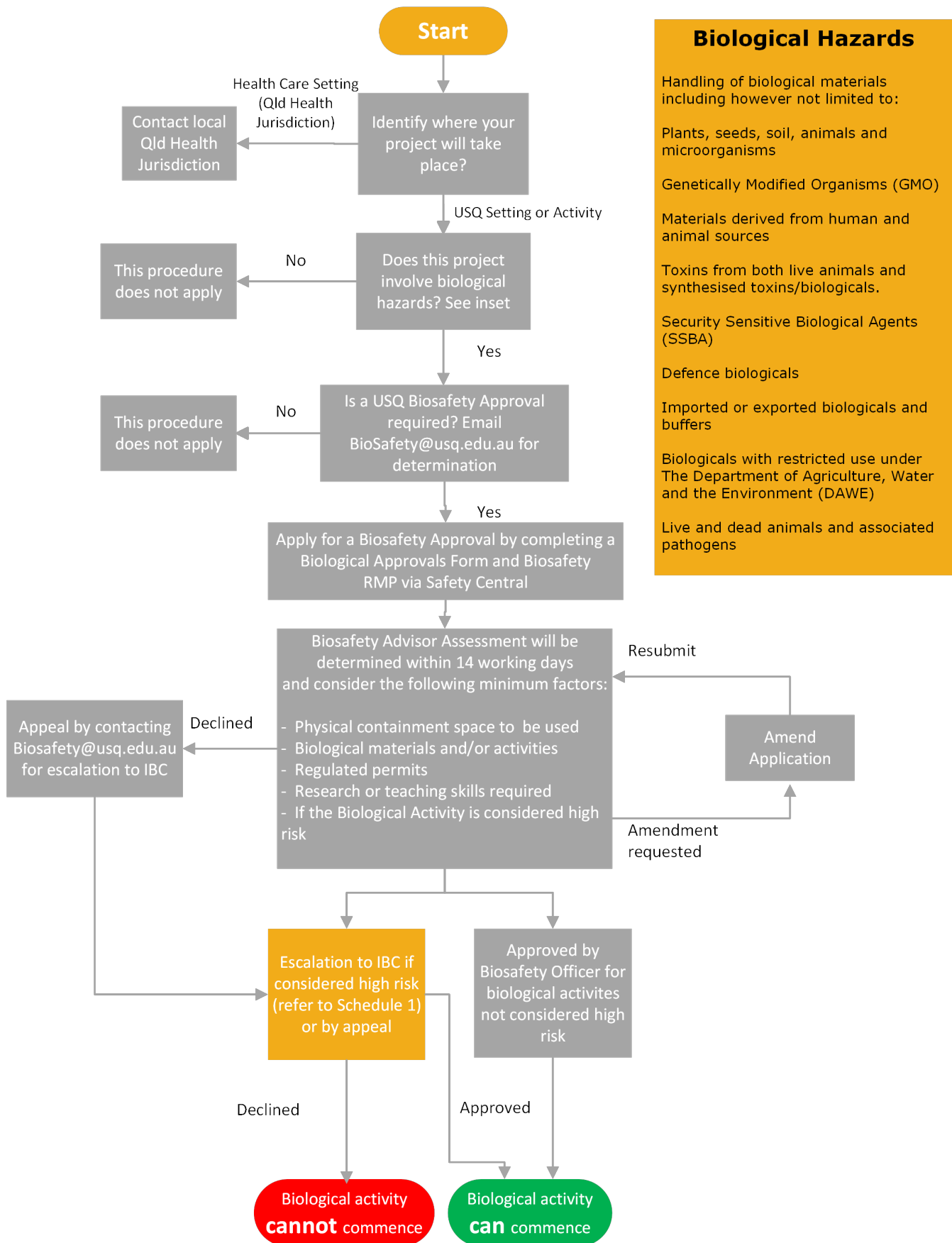
Duty Holder	Duty, Obligation or Responsibility
Institutional Biosafety Committee (IBC)	<p>Review and approve high-risk biological activities and OGTR applications. Monitor approved activities. Provide advice and guidance relating to the management of biological and biosecurity risk.</p> <p>Refer to the High-Risk Biological Materials and Activities.</p>
Supervisors, Technical Officers and Teaching Staff	<p>Drive and influence positive safety culture and compliance. Ensure that biological activities under their guidance/direction or within their laboratory, facility or teaching space are approved and conducted in accordance with this procedure.</p> <p>Carry out tasks delegated by the Appointed Facility Officer.</p>
Appointed Facility Officer	<p>Ensure that biological activities occurring within their laboratory, associated facility or teaching space are approved and conducted in accordance with this procedure.</p> <p>While retaining accountability, the Appointed Facility Officer may delegate tasks to Supervisors, Technical Officers and Teaching staff as appropriate to ensure that obligations and duties are sufficiently managed.</p>
Biosafety Advisor	<p>Provide advice and guidance on biosafety and biosecurity compliance and risk management as detailed in this Procedure and as prescribed under relevant legislation.</p> <p>Facilitate the approval process for biological activities.</p>
Employees, Students, Visitors, Research Workers and Contractors	<p>Ensure that any biological activities undertaken are conducted in accordance with the Biosafety Procedure.</p> <p>Refer to the Biological Standard Work Practices Schedule.</p>

4.2 Application, Approval and Assessment of Biological Risk

When considering a new activity which may involve the use of biological materials, Employees, Research Workers and Students must ensure that a Biological Approval has been granted if the activities involve biological hazards.

The Biological Approval must be granted prior to work commencing. Refer to Diagram 1 for biological hazards and the approvals process. For advice on whether a Biological Approval is required, email BioSafety@usq.edu.au. Biological Approval forms can be accessed and submitted via Safety Central.

A Risk Management Plan (RMP) for biological activities must be developed in accordance with the Work Health and Safety Risk Management Procedure as part of the Biological Approval process. An RMP example template for Biological Activities and risk management guidance can also be found at Safety Central.



Biological Hazards

Handling of biological materials including however not limited to:

- Plants, seeds, soil, animals and microorganisms
- Genetically Modified Organisms (GMO)
- Materials derived from human and animal sources
- Toxins from both live animals and synthesised toxins/biologicals.
- Security Sensitive Biological Agents (SSBA)
- Defence biologicals
- Imported or exported biologicals and buffers
- Biologicals with restricted use under The Department of Agriculture, Water and the Environment (DAWE)
- Live and dead animals and associated pathogens

Diagram 1. Biological Activities Approval Workflow

4.3 Standard Work Practices for Employees, Undergraduate Students and Research Workers

Once a Biological Approval has been granted, all approved work must be undertaken in accordance with the Biosafety Standard Work Practices Schedule.

4.4 Physical Containment Laboratory Access Rules

4.4.1 Undergraduate Student access (excluding Honours)

Undergraduate Student access to PC spaces must be approved by the Appointed Facility Officer **only** upon satisfying the following rules:

- Teaching activities and Course work involving biological organisms must have an approved Risk Management Plan (RMP); and
- Students must complete local laboratory inductions as provided by the undergraduate school to access biological laboratory teaching spaces in accordance with this Procedure; **and**
- Undergraduate Students are not permitted to handle Risk Group 2 (RG2) organisms in teaching laboratories. To determine if an organism is RG2, consult the relevant Pathogen Safety Data Sheet or contact the Biosafety Advisor;
- Undergraduate Students may observe RG2 organisms during demonstrations in accordance with an approved RMP. RG2 organisms must be doubly contained for demonstration;
- Undergraduate Students may only handle RG2 organisms in exceptional circumstances upon approval by the Biosafety Advisor and IBC (if required).

4.4.2 Employee and Research Worker Access (including Honours)

Access to PC spaces can be approved by the Appointed Facility Officer **only** upon the Employee or Research Worker satisfying the following requirements:

1. Completion of University biosafety training modules prior to commencing approved biological activities. Modules are accessible through Safety Central; **and**
2. Completion of the local laboratory safety induction; **and**
3. Receipt of a Biological Approval for proposed activities.

The Appointed Facility Officer may request that the Biosafety Advisor conduct a review to determine whether an Employee or Research Worker has acted contrary to the specific safety instructions detailed in this Biosafety Procedure. Access may be authorized, however granted on a conditional basis according to advice provided by the Biosafety Advisor.

The Appointed Facility Officer is to authorize access for Employees and Students through USQ Security in accordance with the University Physical Security Policy. Note: The Appointed Facility Officer has the authority to define access restrictions or permissions based on skill level and experience (i.e. Honours Students).

The Appointed Facility Officer is to review Employee and Research Worker access to their respective PC spaces on an annual basis with the assistance of the Biosafety Advisor.

Records for training and access must be maintained on Safety Central.

4.4.3 Cleaner Access

Cleaner access can be approved by the Appointed Facility Officer **only** upon completion of the University biological laboratories cleaner's safety training module, including refresher training on an annual basis.

Cleaners will also be permitted access at times agreeable with the Appointed Facility Officer.

Cleaners must wear appropriate protective clothing (e.g. dedicated laboratory coats or other fit for purpose clothing) approved by the Appointed Facility Officer when cleaning inside biological laboratories.

There are additional requirements for accessing regulated PC spaces, such as Approved Arrangement (AA) and OGTR Laboratories. Contact the Biosafety Advisor for further Information if applicable.

Contract cleaners work must be limited to wet mopping of floors, removal of clearly marked uncontaminated wastes only (paper waste in general bins, collapsed cardboard boxes) and window cleaning.

4.4.4 Contractors or Maintenance Access

Contractors or maintenance personnel access must be approved by the Appointed Facility Officer **only** upon satisfying the following requirements:

1. Completion of the University contractors or maintenance safety induction and refresher training on an annual basis; **and**
2. Works or maintenance have been appropriately scheduled and communicated to the Appointed Facility Officer, delegated representative, laboratory Employees and Students to ensure minimal disruption. A minimum of 72 hours' Notice should be provided except

where emergency works are required, or an earlier time is mutually agreeable.

There are additional requirements for accessing regulated PC spaces, such as AA and Biosecurity laboratories. Contact the Biosafety Advisor for further Information if applicable.

4.4.5 Visitor Access

The Appointed Facility Officer should be notified of any intended visitor to the facility at least 7 working days prior to the date of the visit.

The Appointed Facility Officer and BioSafety Advisor will assess the Visitor access to the facility prior to the visit, and either approve or decline access.

All visitors must be supervised by an Employee with authorised access and must adhere to the Visitors on University Sites Procedure.

Access to Visitors will be limited depending on the type of activity and any further additional requirements as determined by the Biosafety Advisor and Appointed Facility Officer.

The Appointed Facility Officer must be notified of the supervised visit.

4.5 Biosafety Training

Training must be provided in accordance with **section 4.4, Physical Containment Laboratory Access Rules** for Undergraduate Students, Employees (including visiting scholars), Research Workers, Cleaners, Contractors and Maintenance personnel.

These rules apply to regulated and non-regulated PC spaces.

Responsibilities for ensuring training is completed prior to granting access is defined in section 4.4.

The Biosafety Advisor is responsible for ensuring training is current, fit for purpose and aligns with external legislative requirements and all relevant University Policies and Procedures.

Online biological training modules are available at Safety Central.

Training must be reviewed and updated at least annually by the Biosafety Advisor or earlier (if appropriate) to respond to changes in the regulatory environment.

4.6 Spill Management

All PC laboratories must implement a local spill procedure as appropriate to:

- The biological risk for that laboratory
- The biosafety equipment contained within the laboratory
- Floor drainage capacity for the laboratory safety shower (if installed)
- Regulated laboratory requirements.

Each laboratory must have a relevant supply of spill kit materials and disinfectants that are effective on the biological materials appropriate to the biological risk.

Local laboratory inductions must include spill management guidance to reflect local procedures including:

- Spill kit component locations
- Printed spill management instructions specific to the local laboratory
- Contact details for the Biosafety Advisor.

Refer to the guideline for Biological Spill Management on Safety Central and seek further advice from the Biosafety Advisor.

4.7 Waste Management

Waste streams generated from regulated and non-regulated biological activities must be segregated, stored, decontaminated, disposed of, and tracked in accordance with applicable regulations.

Each laboratory must have facilities (such as bins, storage areas, equipment) to segregate, store, decontaminate and dispose of waste relevant to the biological material risk.

Waste decontamination equipment (e.g. autoclave) local work and maintenance procedures must be in place to ensure sustained effective operation.

Local laboratory inductions must include waste management guidance to reflect local procedures for managing waste.

Refer to the Biosafety Waste Management Guideline on Safety Central.

4.8 Transport of Biological Material and Material Transfer Agreements

The transport of biological material is regulated and may require compliance with prescriptive regulatory guidelines. The primary intent is to ensure that the biological material does not

escape from the package during transport resulting in adverse health, environmental and reputational damage.

When considering the transfer of materials to an external third-party organisation or person, contact Contracts Management Team and the Biosafety Advisor to arrange a Material Transfer Agreement (MTA) (External).

When transferring materials between laboratories or campuses, an MTA (Internal) Materials Transfer Schedule(s) must be completed. An MTA may also need to be signed before receipt of Biological Materials from external organisations or from within the University.

Contact the Biosafety Advisor for further advice regarding the transport of biological materials.

4.9 Biological Materials Receipt

The University has specific requirements which apply to the pickup, delivery, and receipt of biological materials of non-regulated and regulated biological materials.

4.9.1 Non-Regulated Biological Materials

All non-regulated biological materials destined for non-regulated laboratories, whether ordered from a commercial source, gifted, or transferred from another institution must be sent directly to the Main Central Store at Toowoomba (O2). Deliveries to other sites are via special arrangement **only**. Contact the Biosafety Advisor.

Pickup of delivered biological materials must be by the person who ordered the article, their supervisor, or a nominated biosafety trained person.

The packages are to be unpacked within the laboratory. Unpacking outside the laboratory or within the store is prohibited.

In the exception that the biological materials are couriered by a trained University Employee, Student or Research Worker, they can be directly escorted to the intended facility.

4.9.2 Regulated Biological Materials

All regulated biological materials destined for OGTR Laboratories have on-going procedures as defined in the Guidelines for the Transport, Storage and Disposal of GMOs. These Materials must only be transferred between OGTR certified areas as listed on the specific approval and must be delivered directly to the certified laboratory.

4.10 Termination of a Work Protocol

When a Research Worker has completed their Research Activities or project and is departing the University, the termination will require management of the following:

- Biological material removal from shared spaces
- Cleaning and decontamination of allocated storage spaces, surfaces, benchtops, and equipment
- Consolidation and identification of samples that require salvage, storage, and disposal in accordance with USQ Waste Disposal Protocols and the University Sector Retention and Disposal Schedule
- Sharps management
- Chemical disposal or rehoming (if appropriate)
- Regulated hazardous substances management (e.g. Scheduled Drugs and Poisons)
- Decommissioning of a laboratory (if applicable).

Contact the Biosafety Advisor for further Information.

4.11 Inspections and Audits

All PC facilities must be inspected monthly by the Appointed Facility Officer or delegated representative. Refer to Safety Central for Inspection templates. Inspection records and corrective actions must be maintained in Safety Central.

The Biosafety Advisor will complete a minimum of one audit of the Biosafety Procedure per year, however, may perform additional unannounced inspections. Audit records and corrective actions must be maintained in Safety Central.

An audit stock take must be conducted three times per year by the Biosafety Advisor to determine biological materials on hand versus biological material storage inventories.

Regulated laboratories may require further audits and inspections as appropriate to the certification/approval.

Corrective actions will be listed and held to account in respective Safety Sub Committees and the IBC.

4.12 Proposal and Commissioning of a PC Facility

The Executive Director (Facilities Management) must ensure that PC facilities are designed in consultation with the Biosafety Advisor, the IBC, and other key stakeholders critical to the safe operation of the PC space.

An inspection must be completed by the Biosafety Advisor prior to commissioning. The Biosafety Advisor is to compile an inspection report with recommendations for the IBC and key

stakeholders for final consideration and approval.

PC facilities that will propose to operate with biologicals as a regulated PC space (i.e. OGTR or AA certified) may have additional requirements imposed by the relevant regulator.

4.13 USQ Physical Containment Space Information

Information pertaining to USQ non-regulated and regulated PC facilities are to be registered in Safety Central and reviewed at least annually by the Biosafety Advisor.

4.14 Biosafety Procedure Breaches and Incident Management

A breach of this procedure may be considered a breach of the [Student Code of Conduct Policy](#), [Code of Conduct Policy](#) or the Research Code of Conduct Policy by failing to comply with safety instructions for the purpose maintaining a safe workplace under the Work Health and Safety Act 2011. This may result in:

- Dismissal of an Employee for serious or continued breaches
- Restricted Access to Labs
- Conditional access being granted and managed.

The Appointed Facility Officer must ensure that any biosafety near misses, incidents or biosafety procedures breaches are recorded in the [online hazard and incident management system](#) and escalated according to the Incident and Hazard Reporting and Investigation Procedure.

The Biosafety Advisor will investigate and report on any potential breaches of this BioSafety Procedure and make appropriate recommendations commensurate to any breach.

The Biosafety Advisor will refer procedural breaches to Human Resources or Student Services if it is deemed that the relevant code of conduct has been breached.

Biosafety near misses, incidents or biosafety procedures breaches will be escalated to the IBC and/or IBC Executive Committee in accordance with the IBC Terms of Reference.

Biosafety critical incidents are defined as those that could have unacceptable consequences for health, the environment or public perception. Examples of biosafety critical incidents may include but are not limited to:

- Suspected use of a regulated biological materials in a non-regulated laboratory or facility with inappropriate PC

- Suspected use of biological materials in contravention to this procedure
- Loss or theft of biosecurity sensitive material.

Where it is determined that a biosafety critical incident has occurred or has the potential to occur, the Biosafety Advisor must be notified immediately, and the incident recorded in the [online hazard and incident management system](#).

The Biosafety Advisor must notify the Manager (Safety), IBC Executive Committee and specified key University stakeholders in accordance with Incident and Hazard Reporting and Investigation Procedure and provide advice to the Vice Chancellor (VC) on the declaration of a biosafety critical incident.

A critical incident may only be declared by the Vice-Chancellor upon advice from the IBC Executive.

5 References

Nil.

6 Schedules

This procedure must be read in conjunction with its subordinate schedules as provided in the table below.

7 Procedure Information

Accountable Officer	Deputy Vice-Chancellor (Enterprise Services)
Responsible Officer	Director (Safety, Security and Sustainability)
Policy Type	University Procedure
Policy Suite	Work Health and Safety Policy
Subordinate Schedules	Biosafety Standard Work Practices Schedule High Risk Biological Materials and Activities Schedule
Approved Date	31/3/2021
Effective Date	31/3/2021
Review Date	31/3/2024
Relevant Legislation	Biosecurity Act 2014 (Qld)

	<u>Biosecurity Act 2015 (Cwlth)</u> <u>Biosecurity Regulation 2016 (Qld)</u> <u>Defence Trade Controls Act 2012 (Cwlth)</u> <u>Defence Trade Controls Regulation 2013 (Cwlth)</u> <u>Gene Technology Act 2000 (Cwlth)</u> <u>Gene Technology Act 2016 (Qld)</u> <u>Gene Technology Regulations 2001 (Cwlth)</u> <u>National Health Security Act 2007</u> <u>National Security Regulations 2018</u> <u>Work Health and Safety Act 2011 (Qld)</u> <u>Work Health and Safety Regulation 2011 (Qld)</u>
Related Policies	<u>Code of Conduct Policy</u> <u>Research Code of Conduct Policy</u> <u>Student Code of Conduct Policy</u>
Related Procedures	<u>Incident and Hazard Reporting and Investigation Procedure</u> <u>Research Code of Conduct: Management of Potential Breaches Procedure</u> <u>Research Data and Primary Materials Management Procedure</u> <u>Visitors on University Sites Procedure</u> <u>Work Health and Safety Risk Management Procedure</u>
Related forms, publications and websites	<u>AS/NZS 2243.1 - 2243.9: Safety in laboratories</u> <u>Guidelines for the Transport, Storage and Disposal of GMOs</u> <u>Safety Central</u> <u>Online hazard and incident management system</u> <u>USQ Laboratory and Workshop Safety Manual</u>

	<p>Biosafety Application Form (under development)</p> <p>Biological Spill Guideline (under development)</p> <p>Notice of Experimental Activity Card (under development)</p> <p>Biological Material Transport Guideline (under development)</p> <p>Biological Storage, Inventory and Labelling Guideline (under development)</p> <p>Biological Waste Management Guidelines (under development)</p> <p>Biological Inspection Template (under development)</p> <p>Decontamination Certificate Application Form (under development)</p> <p>Biological Safety Training Modules (under development)</p>
<p>Definitions</p>	<p>Terms defined in the Definitions</p>
	<p>Animal</p> <p>Any live non-human vertebrate (that is, fish, amphibians, reptiles, birds and mammals, encompassing domestic Animals, purpose-bred Animals, livestock, wildlife) and cephalopods.</p> <p>Course</p> <p>A discrete element of a program, normally undertaken over a single Teaching Period, in which the Student enrolls, and on completion of which the Student is awarded a grade.</p> <p>Employee</p> <p>A person employed by the University and whose conditions of employment are covered by the USQ Enterprise Agreement and includes persons employed on a continuing, fixed term or casual basis. Employees also include senior Employees whose conditions of employment are covered by a written agreement or contract with the University.</p> <p>Information</p> <p>Any collection of data that is processed, analysed, interpreted, organised, classified or communicated in order to serve a useful purpose, present facts or represent knowledge in any medium or form. This includes presentation in electronic (digital), print, audio, video, image, graphical, cartographic, physical sample, textual or numerical</p>

form.

[Notice](#)

A Notice from the University is a document, whether physical or electronic. A Notice may be: given by hand to the addressee or delivered to the address provided by the addressee to the University; or sent by registered or pre-paid mail to the address provided by the addressee to the University; or sent by electronic communication to the University-issued email account provided by the University to a Student during the period of Enrolment until the completion of their program; or sent by electronic communication to the email address provided to the University by an addressee not enrolled at the University. A Notice is taken to be received if: given by hand to the addressee or delivered to the address provided to the University by the addressee; or sent by registered or pre-paid mail - three University Business Days after the date of posting; or sent by electronic communication - at the time that would be the time of receipt under the Electronic Transactions Act 1999 or its succeeding legislation. A Notice that would be deemed to have been received out of business hours or on a non-University Business Day will instead be deemed received on the next University Business Day.

[Research](#)

Research is the creation of new knowledge and/or the use of existing knowledge in a new and creative way to generate new concepts, methodologies, inventions and understandings. This could include the synthesis and analysis of previous research to the extent that it is new and creative.

[Research Activities](#)

Refers to activities that result in the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings. This could include synthesis and analysis of previous research to the extent that it leads to new and creative outcomes.

[Research Worker](#)

Any person/s involved in Research Activities at, or on behalf of the University. This includes, but is not limited to Employees, Students, visiting scholars, research partners, research affiliates, holders of Honorary or Adjunct positions and research ethics committee members.

[Retention and Disposal Schedule](#)

A legal document issued by the Queensland State Archivist to authorise the disposal of public records, including University Records.

[Student](#)

A person who is admitted to an Award Program or Non-Award Program offered by the University and is: currently enrolled in one or more Courses or study units; or not currently enrolled but is on an approved Leave of Absence or whose admission has not been cancelled.

[University](#)

The term 'University' or 'USQ' means the University of Southern Queensland.

[University Members](#)

Employees of the University whose conditions of employment are covered by the USQ Enterprise Agreement whether full time or fractional, continuing, fixed-term or casual, including senior Employees whose conditions of employment are covered by a written agreement or contract with the University; Members of the University Council and University Committees; Visiting and adjunct academics; Volunteers who contribute to University activities or who act on behalf of the University; Individuals who are granted access to University facilities or who are engaged in providing services to the University, such as contractors and consultants, where applicable.

[Vice-Chancellor](#)

The person bearing the title of Vice-Chancellor and President, or as otherwise defined in the University of Southern Queensland Act 1998, including a person acting in that position.

Definitions that relate to this procedure only

Keywords	Biosecurity, laboratory, OGTR, AA, SSBA, DAWE
Record No	20/480PL