

Title: **Faculty of Science  
& Health Waste  
Management  
Procedure**

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<b>Version</b>	1.1
<b>TRIM file number</b>	11/55406
<b>Short description</b>	This procedure aims to implement facility specific waste stream management to minimise the risks associated with the segregation and disposal of the all waste types generated by the FSc Facilities.
<b>Relevant to</b>	All staff, researchers and students of the Faculty of Science & Health.
<b>Authority</b>	This Policy has been approved by the Dean Faculty of Science & Health under the <i>Governance (Policy and Procedures) Rule 2005</i> of the Council and sections 20 and 32 of the <i>CSU Act</i> .
<b>Responsible officer</b>	Manager, University Laboratories
<b>Responsible office</b>	Faculty of Science & Health
<b>Date introduced</b>	October 2011
<b>Date(s) modified</b>	24/11/11
<b>Next scheduled review date</b>	October 2013
<b>Related University documents</b>	Faculty of Science & Health OH&S Awareness Manual, CSU Radiation Safety Manual, CSU Biosafety Manual, CSU OHS Policy, FSc Risk Assessment procedure, FSc Chemical labelling Procedure, FSc Waste Management Guidelines
<b>Related legislation and references</b>	<ul style="list-style-type: none"><li>• NSW OH&amp;S Act 2000 &amp; Regulation 2001</li><li>• Radiation Control Act 1990 &amp; Regulation 2003</li><li>• Poisons and Therapeutic Goods Regulation 2008</li><li>• <a href="#">Waste Avoidance and Resource Recovery Act 2001 (WARR Act)</a></li><li>• <a href="#">Protection of the Environment Operations Act 1997(POEO Act)</a> amended 2008</li><li>• Road and Rail Transport (Dangerous Goods) Act 1997</li><li>• National Transport Commission (Model Legislation — Transport of Dangerous Goods by Road or Rail) Regulations 2007</li><li>• Australian Standards AS2243 – Safety in the Laboratory Series</li><li>• Management of Clinical and Related Wastes AS/NZS 3816:1998</li></ul>
<b>Key words</b>	Policy, hazardous, waste, substances, chemicals, dangerous goods, reuse, recycle, radiation, cytotoxic, special, asbestos

## 1. PURPOSE

In accordance with the CSU Occupational Health and Safety Policy, the CSU Risk Management Policy and the Occupational Health and Safety Act 2000, the Faculty of Science & Health (FSc) shall provide a safe and healthy environment for staff, students, visitors and contractors. Central to this is staff, students, visitors and contractors understanding their duty of care responsibilities and the specialised risks associated with FSc Facilities.

This procedure aims to implement facility specific waste stream management to minimise the risks associated with the segregation and disposal of the all waste types generated by the FSc Facilities.

## 2. SCOPE

This procedure applies to all staff, researchers and students of the Faculty of Science & Health.

## 3. DEFINITIONS (as per AS/NZS 3816, and NSW legislative)

**Special waste** - as defined in the legislation: *clinical and related waste, Asbestos waste and waste tyres*

**Clinical and related waste**- The definition of 'clinical and related waste' under the Protection of the Environment Operations Act 1997 includes clinical waste; cytotoxic waste; pharmaceutical, drug or medicine waste; and sharps waste.

**Animal waste** – Waste of whole or part of an animal or excteta, from medical or veterinary treatment. Incudes animal tissue where it is contaminated with and infectious organism or treated with chemical classified as hazardous waste. *Does not include those animals used in the university for dissection only.*

**Chemical Waste** - Any unwanted chemical, unidentified chemical mixture, compound or material that is contaminated with chemicals.

**Clinical waste** - human tissue waste, laboratory waste, animal waste resulting from medical or veterinary research or treatment which has the potential to cause disease

**Cytotoxic waste** - material including sharps, that is contaminated with a cytotoxic drug Cytotoxic drugs are toxic compounds known to have carcinogenic, mutagenic and/or teratogenic potential.

**Hazardous waste** - a threat or risk to public health and safety or the environment. Includes anything that is infectious, toxic, mutagenic, carcinogenic, tetratogenic, flammable, corrosive, explosive oxidative or radioactive. From *Australian Code for the Transport of Dangerous Goods by Road and Rail* (National Transport Commission 2008):

- Class 1: Explosives
- Class 2: Gases (compressed, liquefied or dissolved under pressure)

- Division 4.1: Flammable solids (excluding garden waste, natural organic fibrous material and wood waste, and all physical forms of carbon such as activated carbon and graphite)
- Division 4.2: Substances liable to spontaneous combustion (excluding garden waste, natural organic fibrous material and wood waste, and all physical forms of carbon such as activated carbon and graphite)
- Division 4.3: Substances which when in contact with water emit flammable gases
- Class 5: Oxidising agents and organic peroxides
- Division 6.1: Toxic substances
- Class 8: Corrosive substances.

**Human tissue waste** – body tissue, organs limbs and any free flowing liquid body substance e.g. blood. Excludes hair, nails and teeth.

**Laboratory waste** – any specimen or culture discard, including genetically manipulated material and imported biological.

**Pharmaceutical waste** - waste material that arise from pharmaceutical products that have passed their recommended shelf life, drug components generated during manufacture.

**Schedule 8 Drug** – Drugs listed as schedule 8 in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) which are known as Drugs of Addiction.

**Radioactive waste** - Material classified as hazardous or non-hazardous radioactive waste.

**Non Hazardous Radioactive Waste** is classified as a specific activity less than 100 becquerels per gram (2.7 nCi/gm or 2.7 µCi/Kg) or a total activity of:

- less than **40 kBq** (~ 1µCi) of Group 1 radionuclides or
- less than **400 kBq** (~ 10 µCi) of Group 2 radionuclides or
- less than **4 MBq** (~ 100 µCi) of Group 3 radionuclides or
- less than **40 MBq** (~ 1 mCi) of Group 4 radionuclides.

**Hazardous Radioactive Waste** is material or substances with activity levels above the non hazardous radioactive waste levels and must be stored in accordance with Radiation Safety Committee procedures prior to disposal.

**Sharps** - Any item with a sharp point or edge capable of cutting, piercing or penetrating skin.

**Liquid waste** means any waste that:

- has an angle of repose of less than 5 degrees above horizontal, or
- becomes free-flowing at or below 60 degrees Celsius or when it is transported, or
- is generally not capable of being picked up by a spade or shovel.

**Restricted solid waste** is waste that is not 'special' or a liquid or preclassified by Environmental Protection Authority, or a waste possessing hazardous characteristics

**General solid waste non putrescible** glass plastic rubber, paper and cardboard and generally items that can be recycled in a waste stream, building and demolition waste

**General solid waste putrescible** household waste that contains organic material (and animal waste – any dead animal).

**Segregation** – the classifying waste and placing it into an appropriate container immediately after the waste is generated.

**Waste** any matter whether solid, liquid, gas or radioactive.

**Waste stream** movement of materials for the point of generation to the destined disposal.

## 4. PROCEDURE

### 4.1 Waste Stream Management (for FSc Facilities)

The FSc requires individual Facility Managers to document and manage the segregation and disposal of waste into the waste streams outlined in 5.1.1. When developing individual facility waste management systems (e.g. SOPs for segregation, storage and disposal of waste) all FSc relevant documentation will be followed e.g. FSc Waste Management Guidelines and FSc Chemical Labelling Procedure.

#### 4.1.1 Waste Streams

- Office and general waste (including general laboratory waste) – includes non hazardous waste managed by the Department of Facilities Management (DFM).
- Trade waste - DFM negotiate trade waste agreements with relevant councils. The Facility Managers will provide specialist input for the FSc Facilities they manage on request.
- Hazardous waste - Facility Managers are responsible for ensuring hazardous waste is disposed of appropriately and through a suitably registered waste contractor.
- Special waste -
  - Clinical and related waste must be segregated into its many components. Laboratory wastes containing or potentially containing live organisms must be sterilised by pressure steam sterilisation or treated with chemical disinfectant. This sterilisation process must be documented and logged with proof of effective sterilisation.
  - Any asbestos issues relating to buildings are the responsibility of DFM and the Manager of Occupational Health and Safety.

The Facility Manager can introduce additional waste streams after completing a risk assessment (see FSc Risk Assessment Procedure) and implementing the appropriate controls.

### 4.2 Waste Management Training

The Facility Manager (or delegate) is responsible for providing training where required. Training should include:

- Labelling and Storage
- Segregation
- Transportation and contractual requirements – advice should be sort from the labstore prior to purchasing chemicals.
- Spill control kits, their location and the local emergency procedures
- Specific information relevant to waste in the facility

## 5. RESPONSIBILITIES

**Manager University Laboratories** shall:

- develop and maintain the FSc Waste Management Guidelines
- ensure the contract entered into with any third party complies with the relevant Commonwealth and State Legislative and Local Government requirements.
- ensure that hazardous waste management is considered when planning for capital works and refurbishment.

**Facility Managers** shall:

- ensure waste is dispose of in accordance with the relevant waste streams documentation.
- document Standard Operating Procedures for all waste stream disposal for the facilities they manage

**All persons**

- follow the facilities waste stream management documenation
- seek advice and / or training if required
- are required to minimise, where possible, the volume of waste they generated

**Department of Facilities Management** is responsible for

- trade waste agreement with relevant councils.
- office and general waste collections

**Chemical Safety Committee** shall:

- review any contract for Chemical Waste Removal

### Table of amendments

Version number	Date	Short description of amendment
	20/8/11	Initial draft
1.0	September 2011	Amended KKent & LHawkins
1.1	24/11/11	Formatting changes/ include TRIM reference