

# Heron Island Research Station (HIRS) Clinical and Related Waste

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## 1. Scope

This policy applies to all clinical and related waste (refer to definitions in Section 6) from the Heron Island Research Station and may include the following:

- Clinical wastes
- Disposable, previously sterile equipment that may have become contaminated;
- Sharps;
- Pharmaceutical's; and
- Infectious/contaminated animal carcasses and cage linings.

This policy **excludes** the following:

- Animal carcasses – non infected or uncontaminated (refer to 9F General Waste);
- Cage lining – non infected or uncontaminated (sawdust, animal faeces, fur and lining) (refer to 9F General Waste).

## 2. Objectives

- Segregate infectious waste from other waste streams;
- Ensure that the clinical and related (pathological) waste is managed in an environmentally sound manner;
- Comply with environmental and health legislation as well as waste disposal regulations; and
- Avoid risk to health, safety and the environment.

## 3. Procedure

Clinical and Related waste procedures are addressed below:

### 3.1 *Segregation of Wastes*

- Clinical and Related (Pathological) waste should be separated and isolated from all other classes of waste;
- If any other waste or material is mixed or contaminated with Clinical and Related (Pathological) waste, it is to be treated as Clinical and Related (Pathological) waste. All other wastes should be disposed of as per the appropriate procedure.

### **3.2 Waste at Source (e.g. Laboratories)**

- Any bins and liners used to collect or store clinical waste must be yellow and clearly labelled as 'clinical waste' and carry the clinical waste symbol (as per *Environmental Protection Regulation (2000) Waste*).
- Biohazard bags are available in the laboratory store.
- Sharps must be placed in sharps containers before being placed in the clinical waste bins. As a result of a risk assessment on some work, some Clinical and Related (Path) waste may need to be autoclaved before being placed in the bins.
- All containers (bins, bags, sharps containers, etc) used for the storage and/or transport of Clinical and Related (Path) waste will be marked with the Australian Dangerous Goods symbol specifying "Infectious Substances" (ADG Classification – 6.2).
- The Clinical and Related (Path) waste bins should be checked on a regular basis to ensure the bags do not exceed two-thirds full or 6 kg whichever is the lesser.
- Staff and/or students (as decided by Manager, Heron Island Research Station) shall remove the bags from the initial collection containers and seal them before placing them in the dedicated refrigerated storage that must be locked at all times.

**Please ensure that Clinical and Related waste does not overflow from bins.**

### **3.3 Storage**

All bins used to store Clinical and Related (Path) waste must be placed in such a manner as to reduce the risk of spill and/or contamination.

- All bins shall be stored in appropriate areas as determined by the OH&S representative where they cannot be accessed by the general public;
- Waste shall be stored in a weather protected, secured area; and
- The bins shall be stored in a manner that minimises the threat to health, safety and/or the environment.

### **3.4 Spills**

- The Research Station must hold equipment to and have staff who are able to carry out clean up of spills. Spill kits must be easily accessible.
- Any wastes spilled and any disposable equipment that comes into contact with the spilled waste is to be treated as Clinical and Related waste and disposed of in accordance with this procedure. Non disposable equipment and the local area must be thoroughly and effectively disinfected before further use and/or access.

In the event that a Clinical and Related (Path) waste bin has spilled its contents, contact the Manager, Heron Island Research Station.

### **3.5 Transporters of Clinical and Related (Pathological) Waste**

- Transportation shall be in accordance with the Transport Operations (Road Use Management) Act 1995.

### 3.6 Treatment

The waste is incinerated at 1100°C in order to ensure that matter of an infected or contaminated nature is destroyed. The waste shall be treated by licensed contractors on a site licensed to treat wastes of this nature. A copy of the licence cover sheet must be supplied by the contractor to the University before any waste is treated.

The incineration process involves the combustion or burning of wastes under controlled conditions in the presence of excess oxygen. The process typically reduces the total waste volume by 90%. The products of the process are gas emission and inert ash.

## 4. Responsibilities

Responsibilities for Clinical and Related (Path) waste disposal lies with various people within the University. Table 4 outlines these responsibilities:

**Table 4. Responsibilities**

<b>Responsible Person</b>	<b>Duties</b>
Students, Laboratory technicians, Researchers and Academic staff.	<ul style="list-style-type: none"><li>• Segregate the Clinical and Related (Path) wastes from other classes of wastes;</li><li>• Use clearly labelled yellow containers and liners for Clinical and Related (Path) waste;</li><li>• Autoclave, treat, or tightly seal laboratory biological wastes as per the risk assessment, prior to disposal in the Clinical and Related (Path) waste bins; and</li><li>• Follow and be aware of the procedures set out in this operating procedure.</li></ul>
Manager, Heron Island Research Station	<ul style="list-style-type: none"><li>• Place all clinical and related wastes generated on site into refrigerated storage as required.</li><li>• Ensure that students and staff are aware of the operating procedure for Clinical and Related (Path) wastes;</li><li>• Provide adequate environmental management training.</li><li>• Have all necessary equipment available to clean and disinfect the area, in the case of accidental spillage;</li><li>• Arrange disposal of Clinical and Related Waste; and</li><li>• Ensure that contractors are licensed to deal with the collection, transport, treatment and disposal of Clinical and Related (Path) wastes.</li></ul>
Property and Facilities Division	<ul style="list-style-type: none"><li>• Liaise with Heads of Schools and Centres and Executive Officers to ensure that the Clinical and Related (Path) waste management is effectively carried out at the University; and</li><li>• Review the Clinical and Related (Path) waste procedure as necessary in conjunction with relevant School staff and OH&amp;S Unit.</li></ul>
Contractors	<ul style="list-style-type: none"><li>• Ensure that all containers used for Clinical and Related (Path) waste are thoroughly cleansed and disinfected before re-use;</li><li>• Ensure that all Clinical and Related (Path) waste collected from the University of Queensland is treated and disposed on in an environmentally sound manner, and</li><li>• Provide personnel who specialise in the handling, collection and transport of Clinical and Related (Path) waste from the University of Queensland.</li></ul>

## 5. Equipment

The equipment used to handle Clinical and Related (Path) wastes include the following:

- Yellow wheelie bins and other appropriate/dedicated receptacles; and
- Yellow bin liners;
- Dedicated, marked and lockable refrigeration/freezer unit.

## 6. Contacts

Any enquiries regarding Clinical and Related (Path) waste management, contact:

Table 6.0 – Contact Personnel

Enquiry	Department	Contact	Telephone
On site disposal and holding	Centre for Marine Studies	Manager, Heron Island Research Station	4978-1399 Ext 222
Collection and Disposal from Research Station	Centre for Marine Studies	Manager, Heron Island Research Station	4978-1399 Ext 222

## 7. Definitions

### 7.1 Waste

Under Section 13 of the *Environmental Protection Act, 1994*, **waste** is defined as “any gas, liquid, solid or energy (or a combination of wastes) that is surplus to, or unwanted from, any industrial, commercial, domestic or other activity, whether or not of value”.

### 7.2 Pathological Waste

**Pathological Waste** refers to waste of a viral, infectious or contaminated nature. Pathological substances are substances that act as a source, host or carrier of disease. This includes tissue samples, blood samples, faeces, and contaminated equipment such as containers, bags or surgical equipment.

### 7.3 Clinical Waste

**Clinical Waste** refers to any samples (eg. Tissue, venom, blood, serum, and swabs) that have been in contact with, or used in experiments with a pathological substance and includes pathological waste.

### 7.4 Disposable Equipment

**Disposable Equipment** refers to any equipment used in conjunction with pathological substances. A short list of these include: rubber gloves, disposable plastic bottles, filter papers, teats, syringes and some surgical equipment.

## **7.5 Sharps**

**Sharps** refers to objects or devices having a sharp point or protuberance capable of cutting or piercing the skin. They include, but are not limited to, hypodermic needles, scalpels, broken ampoules and any broken glassware.

## **7.6 Pharmaceuticals**

**Pharmaceuticals** refers to drugs used for the prevention, diagnosis, care or alleviation of a disease, ailment, injury or defect in human or animal.

## **8. References**

- Environmental Protection Act 1994
- Health Act 1937
- Draft Waste Management Strategy for Queensland
- Workplace Health and Safety Act 1995 and Regulations
- Transport Operations (Road Use Management) Act 1995
- AS/NZS 3816:1998 Management of Clinical and Related Wastes
- Environmental Protection (Waste Management) Regulation 2000