

Heron Island Research Station (HIRS) Radioactive Wastes

1. Scope

This procedure applies to the collection, transport and storage of wastes that have a level of radioactivity. Disposal applies to materials that are below the level of legal prescription as radioactive substances and/or levels prescribed in The University of Queensland Occupational Health and Safety Unit's (OHS) guideline, *Management of Unsealed Radioactive Wastes*.

IMPORTANT

Waste materials classifiable as prescribed radioactive substances under the Radioactive Substances Regulation will not be handled by the Centre for Marine Studies. There is no provision made for the storage of such wastes at the Heron Island Research Station.

The management of such material will remain the responsibility of the user.

2. Objectives

- To ensure that radioactive wastes are not disposed of through any means at the Heron Island Research Station.
- To ensure compliance with the relevant health, safety and environmental legislation and with the national recommendations for the disposal of radioactive wastes.

3. Procedure

3.1 *General*

All radioactive stock solutions and wastes with radioactive content must be removed from the research station following use. There are no facilities at Heron Island Research Station to store radioactive wastes other than for a short period following the completion of an experiment.

Researchers must ensure that all radioactive materials are transported to and from the Heron Island Research Station in compliance with the Code of Practice for the Safe Transport of Radioactive Materials (2001). If the materials exceed the prescription levels for radioactive substances then users will need to hold licences for **transport** in addition to **use**. Advice on prescription levels and transport procedures can be obtained from the University Radiation Protection Adviser.

Researchers from the University of Queensland must return all radioactive materials to their St Lucia (or other campus) laboratory facilities for any additional treatment or storage prior to disposal in accordance with the requirements of the following:

- The EMS *Radioactive Waste Operating Procedure*
- The OHS Unit's guideline *Management of Unsealed Radioactive Wastes*

Researchers from other institutions must return radioactive sources and wastes to their own institutions or make arrangements for disposal or storage with a University of Queensland school or centre with appropriate facilities.

3.2 Disposal of Packaging Material

Before old containers or packages that formerly contained radioactive materials are discarded, it is essential that any radiation labels be removed or effectively obliterated by the user so that unnecessary alarm is not caused. **Should a labelled package be found by a waste contractor or staff member of the Heron Island Research Station and the generator can be identified, they should be contacted immediately.** Where there is nothing to identify the origin of the package, the University Radiation Protection Adviser should be contacted.

3.3 Waste Process Responsibilities

3.3.1 Waste Generators

Radioactive waste generators include students, and research and teaching staff. Persons who use radioactive materials themselves, or who supervise their use by students, are required to be licensed by the State Health Department. Licensees are required to appoint a **Radiation Safety Officer** (RSO). The Centre for Marine Studies has an RSO and a deputy to act in their absence. It is the responsibility of licensees to ensure that the procedures described above are followed - generally these will be delegated to the RSO.

NOTE

THE ULTIMATE RESPONSIBILITY FOR CLASSIFICATION, LABELLING AND STORAGE OF RADIOACTIVE WASTES RESTS WITH THE GENERATOR OF THE WASTE.

3.3.2 Manager, Heron Island Research Station

- Ensure that students and staff are aware of the operating procedure for radioactive wastes as applicable;
- Provide adequate environmental management safety training; and
- Review the waste management program as is necessary.

3.3.3 Property and Facilities Division

- Liaise with licensees, Radiation Safety Officers and the University Radiation Protection Adviser to ensure that the radioactive waste management is effectively carried out at the University campuses.

4. Enquiries

Please contact the following for advice regarding radioactive wastes:

Radiation Safety Officers	Contact Centre for Marine Studies	(07) 3365 4333
University Radiation Protection Adviser	Occupational Health and Safety Unit	Ph: (07) 3365 54504
Queensland Health Scientific Services	Health Physics Advisory Services	Ph: (07) 3274 9124 and 3274 9133

5. Definitions

5.1 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”.

5.2 Radioactive Wastes

For the purposes of this document, **radioactive wastes** are defined as wastes that, because of their radioactive content, may require specific management arrangements.

6. References

- Australian Standard AS2243:1995 Safety in Laboratories
- Building Act 1975
- Environmental Protection Act 1994
- Health Act 1937
- Radiation Safety Act 1999
- Radiation Safety Regulation 1999
- Sewerage and Water Supply Act 1949
- Transport Operations (Road Use Management) Act 1995
- OH& S Unit - Management of Unsealed Radioactive Waste 2001
- Workplace Health and Safety Act 1995 and Regulation
- Code of Practice for the Safe Transport of Radioactive Material (2001)

7. Radioactive wastes

It is the policy of The University of Queensland HIRS not to permit the disposal of any radioactive wastes on the island or into the surrounding areas. All radioactive wastes must be packaged appropriately and returned to the authorised users own institution for disposal compliance with regulations in the applicable state. It should be understood that these requirements are not confined to licensed amounts: all wastes arising with a potential radioactive content are included.

Researchers using radioactive substances at HIRS must do so under licence authorities granted by the Minister of Health in accordance with the Radioactive Substances Act 1958-1978. Procedures for the use of radioactive substances must also comply with the Radioactive Substance Regulations 1961.

Researchers are also required to submit an internal application to The University of Queensland to perform radioactive work at HIRS and comply with procedures instituted by the University's Occupational Health and Safety Unit to contain spills.

8. Radioactive Waste

Radioactive wastes should not be handled by the Operators. It is the operators responsibility to ensure that all radioactive wastes are handled and removed from the island by the User.

For further information contact the Radiation Officer (St Lucia Campus) on (07) 3365 2365 or ext. 52365.