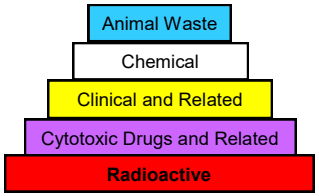
THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

Environmental Management System (EMS)

Guide to Laboratory and Animal Waste Disposal Gatton Campus



TIP: Note down your waste disposal methods at the same time as your risk assessment details.

Are the contents of the waste known?

No → **Refer to EMS Manual or talk to your Supervisor**

EMS Website: www.uq.edu.au/sustainability/policies-and-procedures

Yes

Is the chemical or waste dangerous to handle in its current state?

Consider:
1. Will it react violently if in contact with air, water or moisture?
2. Will it explode/react if dropped?
3. Is the current packaging damaged?

Yes

There is no defined procedure for these types of waste. Each waste must be addressed on an individual basis.

- Refer to the Chemical Waste Operating Procedure https://sustainability.uq.edu.au/files/745/pro_ChmWste.pdf; and/or
- Consult MSDS for chemical waste information and follow MSDS directions for correct disposal.
- In addition to any other information given in the MSDS, waste must also be labelled with the following:
  - Waste generator's name, school, building number and contact phone number.
  - Chemical name, total quantity and concentration of the substance/s.
  - Dangerous goods class diamonds.
- For further information, email the Chemical Store: chemwaste@uq.edu.au

No

Select from the waste categories on Page 2:

- Animal Waste
- Chemical Waste
- Clinical and Related Waste
- Cytotoxic Drugs and Related Waste
- Radioactive Waste

For General Waste and Recycling procedures, refer to the website above.

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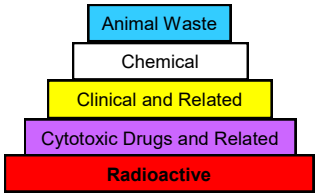


Waste Streams

Animal Waste

Animal waste of a biological nature that has the potential to cause harm by acting as a pathological waste while undergoing decomposition.

Scope:

- Animal carcasses, limbs and tissue that are not infectious or contaminated
- Used animal litter and foodstuffs that are not infectious or contaminated
- Faeces that are not infectious or contaminated

Examples:

_____
_____
_____

Chemical Waste

Any waste generated from the use of chemicals in medical, dental, veterinary and laboratory procedures that has the potential to pose a chemical threat to health, safety and/or the environment, or is chemically hazardous.

Scope:

- Sewerable chemicals
- Inert solids
- Disposal of non-sewerable liquid wastes
- Disposal of non-sewerable solid wastes
- Labelling chemical wastes
- Collection procedures

Examples:

_____
_____
_____

Clinical and Related Waste

Waste of an infectious or contaminated nature. Pathological substances are substances that act as a source, host or carrier of disease.

Scope:

- Clinical wastes
- Any disposable laboratory consumables that may be contaminated by Clinical wastes
- Sharps
- Pharmaceuticals
- Fixed tissue and histology sections
- Infectious or contaminated animal carcasses and cage linings
- Infectious or contaminated faeces

Examples:

_____
_____
_____

Cytotoxic Drugs and Related Waste

Cytotoxic waste is material that is, or may be, contaminated with a cytotoxic drug (a toxic compound known to have carcinogenic, mutagenic and/or teratogenic potential) during the preparation, transport or administration of chemotherapy.

Scope:

- Cytotoxic drugs and related waste
- Any disposable laboratory consumables that may have become contaminated
- Contaminated sharps and pharmaceuticals
- Contaminated animal carcasses and cage linings

Examples:

_____
_____
_____

Radioactive Waste

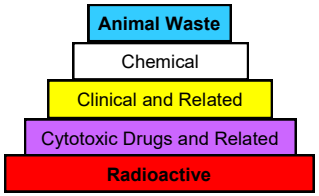
Wastes which because of their radioactive content may require specific management arrangements.

Scope:

- Solvent-based liquid scintillants
- Water-based liquid scintillants
- Radioactive glass and vials
- Dry materials (including contaminated clothing)
- Chemical reagents

Examples:

_____
_____
_____



Animal Waste

Is the material free of any infectious or contaminated material?

Yes

Disposal

Small to medium animal carcasses and parts thereof (≤40kg)

- Dispose of waste in green 240 litre bins with lime green lids, marked as Animal Waste.
- Bins must not weigh in excess of 40kg.
- Remove all animal ear tags and collars. No plastics.

Large animal carcasses and parts thereof (≥40kg)

- Large animals (whole) will be collected on request. Email Animalwaste@uq.edu.au.
- Larger 660 litre bins (up to 120kg capacity) with lime green lids are also available upon request.
- Remove all animal ear tags and collars. No plastics.

Animal litter, foodstuffs and faeces

- Place small volumes of animal litter, foodstuffs and wet/dry faecal matter into 240 litre bins marked as General Waste and store in a cool environment. Place out for General Waste collection.
- Rodent litter must be disposed of in green bins with lime green lids marked as Animal Waste.

Storage

Animal carcasses can be stored in the following locations prior to collection:

- Meat Lab Cold Room 1, Animal Studies Building 8150-128
- Dairy Research Unit Cold Room, Building 8154
- CAAS and Piggery ONLY—Refrigerated store located at the rear of the Piggery.

Collection Points

Animal Waste is collected three times a week from the following locations:

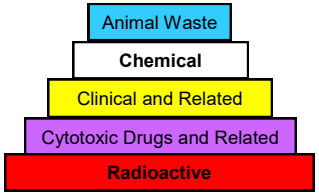
- CAAS—Cold Room
- Building 8369 Freezer—Bovine Clinic and Teaching Facilities
- Building 8179—Clinical Studies Centre
- Building 8150—Meat Lab Cold Room 1
- Building 8114—Vet Science Building
- Building 8106—John Mahon II
- Building 8162—Dairy Complex
- Building 8156—UQ Veterinary Medical Centre

No

Dispose of as either of the following as appropriate:

- Clinical and Related Waste (page 5)
  or
- Cytotoxic Drugs and Related Waste (page 6).

Note:
All wildlife within the School of Agriculture and Food Sciences must be incinerated as per the School Wildlife Permit. Disposal is through the Clinical Waste Stream (page 5).



Chemical Waste

Is it sewerable?

Check the Queensland Urban Utilities Trade Waste Acceptance Criteria and/or check with your Supervisor and/or risk assessment details.

Yes

- Waste must be miscible (soluble) with water.
- Waste **must not** be TOXIC (DG6) or hazardous to aquatic, marine and terrestrial life and environments (refer to MSDS).
- Waste **must not** be FLAMMABLE (DG3) *at the point of being sewered* (i.e. when it is put down the sink). Acceptable flammable liquids must therefore be less than 10% of their explosive concentrations (refer to MSDS) *before* being sewered.
- Waste solutions must be within a pH range of 6 to 10.
- Chemicals must not be hazardous to sewage plant operators, especially in the plant or in confined spaces.

Specific examples:

_____
_____
_____

No

Is it a liquid?

Yes

Refer to the Chemical Store website to request appropriate chemical waste containers and subsequent collection: http://www.science.uq.edu.au/facilities/content/uq-science-store.

- Ensure only one 'individually generated' waste is placed in each container.
- Ensure container is appropriately sealed.
- Ensure container is appropriately labelled—ALL containers must be labelled with pre-formatted labels supplied by the Chemical Store.

Specific examples:

_____
_____
_____

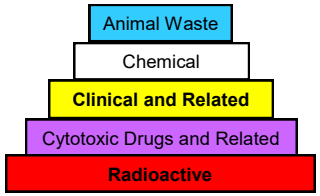
No

Waste must be sealed in an appropriate and compatible container (refer to MSDS). Refer to the Chemical Store website to request chemical waste containers and subsequent collection: http://www.science.uq.edu.au/facilities/content/uq-science-store.

Waste container must be labelled with a pre-formatted label supplied by the Chemical Store.

Specific examples:

_____
_____
_____



Clinical and Related Waste

Is it Clinical and Related Waste?

i.e. Waste of an infectious or contaminated nature. Pathological substances are substances that act as a source, host or carrier of disease.

Yes

Is the waste sharps?

Yes

- Place waste into yellow sharps container
- Container to be labelled as 'Clinical Waste'

No

Does the waste require autoclaving?
Refer to : OGTR Guidelines
AS/NZS 2243.3
Conditions on BIQ Permits

Yes

- Follow departmental procedures for autoclaving
- Ensure waste is in yellow autoclave bags

No

No

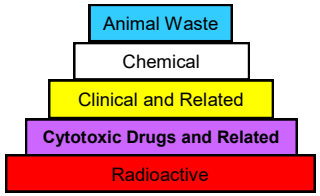
Can it be perceived as being Clinical Waste (e.g. rubber gloves, lab coats, etc)?

Yes

No

Place into General Waste bins

- Place waste into yellow bins with yellow liners. The bins must be labelled as 'Clinical Waste'.
- Liners should only be filled to two-thirds capacity or 6kg, whichever is the lesser.
- Remove the filled liners and place in yellow 240 litre wheelie bins. Lock the bins and place them in a dedicated area for collection.



Cytotoxic Drugs and Related Waste

Is it Cytotoxic Drugs and Related Waste?

Refer to: DTIR Guide for Handling Cytotoxic and Related Waste
NHMRC National Guidelines for waste management in Health Care Industry

Yes

Is the Cytotoxic waste sharps?

Yes

- Place waste into purple sharps container
- Container should be labelled as 'Cytotoxic Sharps' and 'Incinerate at 1100° Celcius'

No

- Segregate the Cytotoxic Drugs and Related Waste from other wastes
- If any other waste or material is mixed or contaminated, it must be treated as Cytotoxic Drugs and Related Waste
- Place all Cytotoxic wastes in purple containers/bins that are marked with the white Cytotoxic label

No

Can it be perceived as being Cytotoxic and Related Waste (e.g. rubber gloves, lab coats, etc)?

Yes

- Segregate the Cytotoxic Drugs and Related Waste from other wastes
- If any other waste or material is mixed or contaminated, it must be treated as Cytotoxic Drugs and Related Waste
- Place all Cytotoxic wastes in purple containers/bins that are marked with the white Cytotoxic label

No

Place into General Waste bins

- Tightly seal Cytotoxic Waste bags/bins prior to disposing in the purple 240 litre wheelie bins.
- Lock the purple wheelie bin and place it in a dedicated area for collection.
- Contact the Cleaning Manager, Property and Facilities Division, Ext. 53543 to arrange collection of purple 240 litre wheelie bins.

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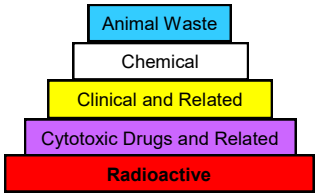

Radioactive Waste

Solid

Is it below regulatory levels?
Refer to PPL 2.80.05 Management of Unsealed Radioactive Waste or contact your Department's Radiation Safety Officer.

Yes

Glass, paper and other dry materials:
- Dispose of as Clinical Waste or General Waste as appropriate.
- *Go to Clinical Waste, Page 5*

Solvent-based Liquid:
- Dispose of as non-sewerable liquid through the Chemical Waste system.
- *Go to Chemical Waste, Page 4*

No

Store until activity is below applicable Reg level OR increase dilution to below regulatory levels.

When storing, container must state:
- isotope
- date for safe disposal
- contact
- chemical content/nature of any additional hazard

Liquid

Solvent-based

Is it below regulatory levels?
Refer to PPL 2.80.05 Management of Unsealed Radioactive Waste or contact your Department's Radiation Safety Officer.

No

Store until activity is below applicable Reg level OR increase dilution to below regulatory levels.

When storing, container must state:
- isotope
- date for safe disposal
- contact
- chemical content/nature of any additional hazard

Water-based

Is it below regulatory levels?
Refer to PPL 2.80.05 Management of Unsealed Radioactive Waste or contact your Department's Radiation Safety Officer.

Yes

Sewerable Liquid
- Dispose of liquid to designated sink under supervision of the Radiation Safety Officer.
- Ensure scintillant is diluted to such that it is at a safe disposal level.