POLICY APPLIES TO:
All Staff, Credentialed Specialists, Allied Health Professionals, patients, visitors and contractors will be supported in meeting policy requirements.

RELATED STANDARDS:
- Equip Standard 3.2.3 Waste and Environment Management
- Health & Disability Sector Standards NZS 8134:2001 (Standard 5.7)

RATIONALE:
All waste shall be handled in such a manner that it does not cause harm, injure or cause offence to people, to community cultural values or to the environment.

DEFINITIONS:

Three types of waste; Controlled, Hazardous, Non Hazardous (General)

1. Controlled Waste

Healthcare waste that is recognizable as coming from a healthcare facility which:
May be contaminated or soiled with potentially infectious human body fluids which will not be expressible under compaction; Is not infectious but may be considered culturally or aesthetically offensive.

- Non Expressible Waste
  Waste containing liquid which will not leak under compaction

- PVC Waste
  Any IV fluid bags, oxygen masks and tubing, and suction tubing for recycling

2. Hazardous Waste

A component of the waste stream exhibiting characteristics posing a threat or risk to public health, safety or the environment.

Clinical Hazardous Waste - Any waste which consists wholly or partly of human or animal tissue, blood or other bodily fluids, drugs or other pharmaceutical products, swabs or dressings, syringes, needles or other sharp instruments, being waste which unless rendered safe may prove hazardous to any person coming into contact with it.

- Expressible Waste
  Waste containing liquid which has potential to leak under compaction
• **Sharps waste**
  Object or devices having sharp points or cutting edges capable of causing injury or puncturing containers

• **Cytotoxic Waste**
  Items contaminated or potentially contaminated with a cytotoxic drug.

• **Body Parts**
  Body parts waste is any human tissue, bone and/or organs.

• **Infectious Waste**
  Items contaminated with blood and body fluids that are able to have liquid expressed from them this includes waste from an isolation room

• **Radioactive Waste**
  Items contaminated or potentially contaminated with radioactive substances

**Non Clinical Hazardous Waste**
• Hazardous waste not categorised as infectious cytotoxic or radioactive
  E.g. waste oil, batteries, gas cylinders, chemicals

**Non Clinical Recyclable Hazardous Waste**
• Hazardous waste not categorised as infectious cytotoxic or radioactive but suitable for recycling e.g. batteries & light bulbs

3. **General Waste - Non Hazardous General Waste**

General waste items or recyclable waste that poses no threat or risk to public health, safety or the environment.

• **Kitchen Waste**
  Green waste, food scraps etc.

• **General Waste**
  Any waste deemed disposable without controls, either landfill or to the sewer.

• **Recyclable**
  Any product or package that can be collected and processed for re-use.

• **Confidential Paper Waste**
  Any patient information or commercially sensitive papers is placed into locked blue document destruction bins until collection by external contractors.
GENERAL DEFINITIONS:

**Point of Disposal**
The practice of bagging waste at the point of generation

**PPE**
Personal Protective Equipment

**Sanitary Landfill**
A landfill that provides for methods of disposing of waste on land in a manner that protects the environment

**Waste Segregation**
Waste that fits into more than one category shall be classified according to the highest risk

OBJECTIVES:
- Minimise risk
- Minimise waste
- Maximise recycling
- Ensure handling of waste is based on best practice principles
- Ensure staff are aware of and compliant with waste management policy and processes.

IMPLEMENTATION:
All staff shall be trained in waste management as part of their orientation and will receive waste education updates (as per mandatory training and update schedule).

The Housekeeping and Linen Team Leader is the appointed Waste Management Officer. This role will provide oversight of the waste management system; to include all staff education covering cytotoxic waste for the appropriate staff, a waste analysis, reporting and benchmarking.

Two nominated housekeeping members of staff shall undergo bi annual ‘stationary compactor operator competency assessments’ by the compactor contractor confirming them as authorised trainers to Mercy Hospital staff.

Staff with the specific responsibility for use of the compactor for disposal of waste shall receive education by the authorised trainers.

The Waste Management Officer will arrange visits to waste disposal sites for Housekeeping staff who transport waste on site.
The Waste Management Officer shall produce an annual waste report to the Infection Prevention and Control Committee. This report will be disseminated to staff in newsletters and service area waste education updates.

The report will include:
- Cost analysis of each stream
- Waste incidents, type and number
- Changes of practice
- Audits reports: segregation, contractor and internal
- Education and promotion

EVALUATION
- Incident reports
- Patient feedback
- Staff feedback
- Staff training records
- Audit reports

ASSOCIATED DOCUMENTS

EXTERNAL
- Guidelines for the Safety Handling of Cytotoxic Drugs and Related Waste, OSH 2007
- Non-therapeutic use of human tissue, New Zealand Standard DZ 8135/V7.4 draft 2008
- Transport NZS 5433:1988 Code of Practice per of Hazardous Substance
- Resource Management Act 1991

INTERNAL
- Mercy Hospital Orientation Book
- Standard Precautions Policy
- Hand Hygiene Policy
- MDRO Policy
- Blood and Body Fluid Exposure Policy
- Mercy Hospital Emergency Plan
- Radiation Policy
- Cytotoxic Safe Handling Disposal and Storage
- Return or Disposal of Body Parts / Human Tissue
- Tikaka Best Practice Guidelines for Mercy Hospital, Hospital Policy and Information Manual
- Mercy Hospital Food Safety Programme - Item 14, Rubbish waste control
- Incident Management Policy
- Global Waste Management Audit, F:\Mercy Shared\Audits\Global Audits\Global Audit Tools
- Cytotoxic Safe Handling Disposal and Storage
WASTE CATEGORIES

Healthcare Waste

1. Controlled Waste
   - Non-expressible disposable gloves,
   - PVC waste
     - E.g. IV fluid bags, oxygen masks and tubing, and suction tubing

2. Hazardous Waste
   - Clinical Hazardous
     - Sharps
       - Includes cytotoxic and infectious e.g. Transdermal patches
   - Non-clinical Hazardous Waste
     - Waste oil, chemicals
     - Non-sharps
       - Includes cytotoxic infectious Human tissue
   - Recyclable hazardous waste
     - Batteries Light bulbs

3. General Non-hazardous
   - Recyclable Waste
     - Newspapers plastics (1-7), cans, glass, cardboard
   - Non-recyclable Waste
     - Kitchen waste, plastics other than 1 to 7
Process

Appropriate Containers and Packaging – for all waste streams

All waste shall be packaged in appropriate containers according to categorisation. Healthcare waste requires special handling and storage this is identifiable by using the appropriate containers/packaging.

Bags for waste shall be as follows:
- Have sufficient strength to contain the waste safely.
- Conform to colour coding and marking.
- Allow for secure closure.
- Be filled no more than two thirds full.
- Not be secured with staples or other sharp devices.
1. CONTROLLED WASTE

Healthcare waste that is recognizable as coming from a healthcare facility which may be contaminated or soiled with potentially infectious human or animal body fluids which shall not be expressible under compaction;

Healthcare waste that is not infectious but may be considered culturally or aesthetically offensive.

Controlled Waste Bins

Green wheelie bins with red lids are available throughout the facility and are used for transfer of controlled waste to the storage area for collection by the contractor.

PVC Waste Bins

White bins with white lids are available throughout the facility and are used for transfer of PVC waste to the storage area for collection by the contractor.

Storage

Controlled waste is transported from generation points throughout the hospital, via waste chute’s or appropriate bins to the lower ground floor, where it is then transferred to the compactor for storage until collection by external contractors.

PVC waste is transported from generation points throughout the hospital, via PVC waste bins and the waste chute’s to the lower ground floor, where it is then transferred to a collection pallet for storage until collection by external contractors.

Controlled/General Waste Disposal

When the compactors/wheelie bins are filled to capacity Housekeeping staff are responsible for telephoning the external contractor who will remove the compactors from the site and take to appropriate landfill for emptying and final disposal procedures and then return compactors.

Controlled/ PVC Waste Disposal

When the PVC collection pallet box is filled to capacity, Housekeeping staff are responsible for telephoning the external contractor who will remove the pallet from the site and take to the recycling company centre. An empty collection pallet box will be supplied.

Examples of Controlled Waste
The following are examples of materials that may be classified as controlled waste provided they contain no expressible liquid:

- Intravenous plastic cannulas, epidural catheters
- Unused test tubes, syringes empty (no needles) from the needleless system
- Drainage collectors emptied of contents (i.e. haemovacs, colostomy equipment, minivacs)
- Catheters (i.e. urinary, suction rectal, naso-gastric)
- Disposable sheeting (e.g. plastic sheeting, incontinence pads)
- Disposable Scopes (e.g. sigmoidoscope, specula)
- Used dressings, swabs, gauze etc., material from dressing packs
- Specimen containers, used and emptied
- Used tissues, emptied sputum mugs, emptied vomit bowls
- Disposable gloves, masks, gowns, plastic aprons
- Disposable wash cloths
- Disposable airways, bacterial viral filters, oral/pharyngeal suction catheters, endotracheal tubes, laryngeal masks
- Sanitary pads and disposable nappies
- Surgical drapes
- Patient warming blanket and patient heating pads

Examples of PVC Waste

The following are examples of materials that may be classified as PVC waste:
- IV fluid bags
- IV tubing with spike removed
- Oxygen masks with clip and straps removed
- Oxygen tubing
- Suction tubing
2. HAZARDOUS WASTE

A component of the waste stream exhibiting characteristics posing a threat or risk to public health, safety or the environment.

Appropriate containers and packaging

- **Clear Plastic Bags**
  These are available in all areas for the bagging of hazardous waste at point of use prior to double bagging into the yellow biohazard bag.

- **Yellow Biohazard Bags**
  These yellow plastic bags with the biohazard symbol are for waste containment of expressible blood and body fluids. Heavy weight yellow plastic bags are available from the Housekeeping & Linen Team Leader in approved areas.

- **Purple Cytotoxic Bags**
  Purple plastic bags are available for cytotoxic waste in approved areas.

- **Sharps Containers**
  A range of sizes of containers are available and must be suitable for the size and volume of sharps generated. Contact the Occupational Health and Infection Prevention and Control Nurse for product information and assessment.

- **Yellow Wheelie Bins**
  These are for clinical hazardous waste and are available in clinical areas and are containers for storage of filled biohazard waste bags and are used for transfer of waste from these areas to the storage area for collection by the contractor.

- **Purple Cytotoxic Bins**
  Purple cytotoxic bins are available for cytotoxic waste in authorised areas.

**STORAGE**

**Clinical Hazardous Waste**
All Hazardous Clinical Waste is secured in a dedicated storage area in appropriate hard-shelled wheelie bins labelled with tags that identify the service area where the waste is generated until collected by outside contractor. This includes the sharps containers that are placed in the hard shelled wheelie bin.
Non-Clinical hazardous waste & Recyclable hazardous waste

- **Chemical Waste**
  This waste is stored in secured chemical store until the Housekeeping and Linen Services Team Leader arrange collection for disposal.

- **Gas Cylinders**
  These are secured in a dedicated storage area. Gas cylinders are not discarded as waste but are collected by outside contractor for refilling.

- **Batteries**
  These are stored in an identifiable container by lower ground dumb waiter until collected by outside contractor.

- **Solvents, waste oil, paints, lacquers, fluorescent tubing**
  These items are stored within the maintenance department until disposal.

- **Ink Cartridges**
  These are forwarded to the Mercy Hospital Administration Assistant and stored in the Administration department for processing.

**DISPOSAL**

Clinical Hazardous Waste

This waste is collected by an external contractor who collects all filled wheelie bins from storage area and transfers to a dedicated site where the waste is weighed before steam sterilisation and grinding is undertaken. This process reduces volume and makes the waste unrecognisable before transfer to appropriate landfill.

**NOTE:** As Mercy Hospital is responsible for all waste from generation point until disposal, the Housekeeping Team Leader (or Housekeeping Coordinator in absentee) is responsible for ensuring “Dangerous Goods Declaration” forms are available in the dedicated storage area for the vehicle driver transporting each consignment of this waste.

Disposal

Non Clinical Hazardous Waste

- **Chemical waste**
  Any unused or waste chemicals should be notified to the Waste Management Officer who will arrange for their collection and disposal.

- **Ink Cartridges**
Once the Administration Assistant has collected a box full of used cartridges, they are sent to Croxley Recycling.

- Gas Cylinders
  These are not discarded as waste. The Mercy Hospital maintenance department informs the Gas Supply Company when there are six empty cylinders in storage, and the cylinders are subsequently collected and replaced with refilled cylinders.

- Paints etc.
  The Maintenance department staff takes empty tins/surplus paint to DCC waste site for appropriate disposal.

- Batteries
  The Housekeeping Team Leader contacts the general waste contractor who collects the batteries for appropriate disposal.

Examples of Clinical Hazardous Waste

- Waste from isolation rooms
- Sharps waste this includes metal objects such as hip and shoulder joints/staples, and other similar metal objects
- Receptacles containing expressible body fluids e.g. drains and drainage bottles containing body fluids, suction liners containing fluids
- Waste containing expressible fluids
- Cytotoxic waste
- Body parts/ human tissue

Examples of Non Clinical Hazardous Waste

- Asbestos
- Acids or other unidentifiable liquids
- Batteries
- Chemicals
- Drums (both empty and full)
- Explosives
- Flammable liquid
- Gas cylinders
- Herbicides or Pesticides
- Metallic dust powder
- Paints, dyes, ink cartridges and lacquers
- Solvents
HAZARDOUS WASTE SPILLAGE PROCEDURES

Chemical Spills
Ensure all spills are attended to immediately, minimising the risk from exposure in the event of a chemical spill. Spill kits are available in;

- Theatre
- DSU
- McAuley
- Maintenance
- Lower ground floor near medical supplies room
- Waste shed
- Kitchen
- Mercy Cancer Care (MCC) - a specialised kit is available in the MCC unit for the management of cytotoxic spills

Procedure for Spill Management
1. Control
2. Contain
3. Clean up
4. Disposal
5. De contaminate
6. Restock spill kit
7. Review contingency plans

Spill Kit Contents
- Safety Goggles
- Rubber Gloves
- Absorbent Material to Soak up Spill
- Dust Pan and Brush
- Rubber Apron
- 2 x Plastic Bags

Blood and Body Fluid Spills
Divercleanse or Oxivir can be used for cleaning blood or body fluid spills

Product: Divercleanse
- Dilution: 1:9=100mls per litre of water (delivering 5000ppm available chlorine)
- Always use cold or tepid water - never hot

Product: Oxivir (no dilution required)
- Located in Cleaners Cupboard / sluice on McAuley and DSU
Cleaning Procedure – carpet and fabric upholstery - hard flooring
• Do not use bleach products – Refer Housekeeping Work Manual in SharePoint

OTHER WASTE

• Waste oil – contact Maintenance
• Fluorescence tubing light fittings– contact Maintenance

3. NON HAZARDOUS WASTE (General Waste)

Non-recyclable items or recyclable waste that poses no threat or risk to the public health, safety or the environment.

Appropriate packaging and containers

White Plastic Bags
These are available in various sizes for lining waste bins.

Black Plastic Bags
These are a heavier weight than the white plastic bags with different sizes for use as liners of larger waste containers.

Containers for non-hazardous waste (general waste)
Green wheelie bins with green lids are available throughout the facility and are primarily used for transfer of general waste to the storage area for collection by the contractor.

Storage & Disposal Recyclable Waste
The following recyclable containers are collected by external contractors and taken to recycling depots.

• Paper Waste
Newsprint, newspapers, paper, magazines and telephone books are stored in green wheelie bins labelled as ‘Newspaper ‘on the loading dock.

• Cardboard / Polystyrene / Shrink Wrap Waste
Cardboard is flattened and along with above waste types, is then transferred to the cardboard compactor for storage. When compactor is full, Housekeeping staff call the external contractor who will remove the compactor offsite and take to recycling depot, and return compactor
Note: Do not place cardboard that has been contaminated with food into this waste stream-place in general waste
- **Plastic/Glass/Cans**
  This waste is stored in mixed recycling green wheelie bins with yellow lids on the loading dock until collection by outside contractors.
  Note: Plastic waste includes all plastic containers labelled 1 to 7.
  - Plastic recyclable containers that have contained chemicals must be:
    1. Rinsed 3 times in cold water
    2. Signed and dated
    3. Labelled “defaced hazard” onto container
    4. Container placed in recycling bin

- **Confidential Paper Waste**
  Any patient information or commercially sensitive papers must be shredded or stored in locked blue document destruction bins. When the bins are filled, staff should notify main reception advising this to arrange for the external contractor to remove and replace bin.

- **Non-recyclable Non Hazardous Waste (Food) - compostable**
  Compostable food waste is kept in the kitchen in green wheelie bins with a green lid until collection by the gardener and the bin is sanitised after it has been emptied.

**Examples of Non-recyclable waste; (general waste)**

- Disposable hand towels and tissues
- Food waste
- Wrapping paper
- Discarded flowers
- Discarded stationery items
- Other plastics not classified as 1 or 7

**Disposal Non-recyclable Non Hazardous Waste (general waste)**
When the compactors are full, housekeeping staff will notify the external contractor who will remove the compactors from the site and take to appropriate landfill and replace.