

WASTE MANAGEMENT POLICY®

DOCUMENT SUMMARY/KEY POINTS

- This document:
 - Identifies the requirement for education and training for all workers who are required to handle all types of waste.
 - Outlines SCHN requirements to comply with NSW Government Resource Efficiency Policy (GREP).
 - Outlines the different waste streams and their definitions.
 - Identifies waste minimisation strategies.
 - Provides a detailed explanation on waste segregation and its significance.
 - Outlines correct handling, labelling, containment, and storage of all waste streams.
 - Outlines correct methods of disposal for various waste items.
 - Provides a written step by step guide to managing hazardous spills.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1 st August 2023	Review Period: 3 years
Team Leader:	Manager	Area/Dept: Corporate Services

CHANGE SUMMARY

- Training requirements changed. No longer renewed every 5 years.
- Minor changes made throughout; recommend re-reading the policy.
- Inclusion of additional spill management procedures.
- No change to practice.
- **08/02/24:** minor review- addition of NSW MOH PD2020_049 Clinical and Related Waste Management for Health Services

READ ACKNOWLEDGEMENT

- Training:
 - Mandatory training required; see HETI Waste Management eLearning course: (Course Code 39966595)
 - Relevant clinical staff complete HETI eLearning courses relating to Handling antineoplastic drugs and related waste safely.
 - Relevant staff complete HETI eLearning course for Hazardous Chemical Spills (Course Code: 219012451)
 - Relevant staff complete departmental specific training for handling and disposal of waste as per local procedures and safe work practices.
- All staff are to read and acknowledge they understand the contents of this policy.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

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TABLE OF CONTENTS

Introduction	4
Administration	4
Education, Training and Work Health and Safety	5
Government Resource Efficiency Policy (GREP)	6
Waste Streams and Definitions of Waste	6
<i>Pharmaceutical Waste</i>	7
<i>Cytotoxic Waste</i>	7
<i>Chemical Waste - hazardous and non- hazardous</i>	7
<i>Radioactive Waste</i>	7
<i>Hazardous Waste</i>	7
<i>Biohazard Waste</i>	8
<i>Imported Biological Materials</i>	8
<i>Microbiological Waste</i>	8
Waste Minimisation	9
<i>Product Substitution</i>	10
<i>Product Modifications</i>	10
<i>Procedural Changes</i>	11
Waste Segregation	11
Waste Handling, Labelling, Containment, Transport and Storage	12
Waste Disposal	15
Auditing of Waste	18
Workplace Health and Safety	18
Spill Management	19
<i>Equipment</i>	20
Hazardous Spill including chemical and biological	22
Points of contact	22
References	23

Introduction

The Management and Staff of the Sydney Children's Hospitals Network (SCHN) are committed to maintaining waste management systems that protect the environment, are safe, efficient, and cost effective. SCHN will achieve this through staff education, promotion, and the monitoring of waste disposal.

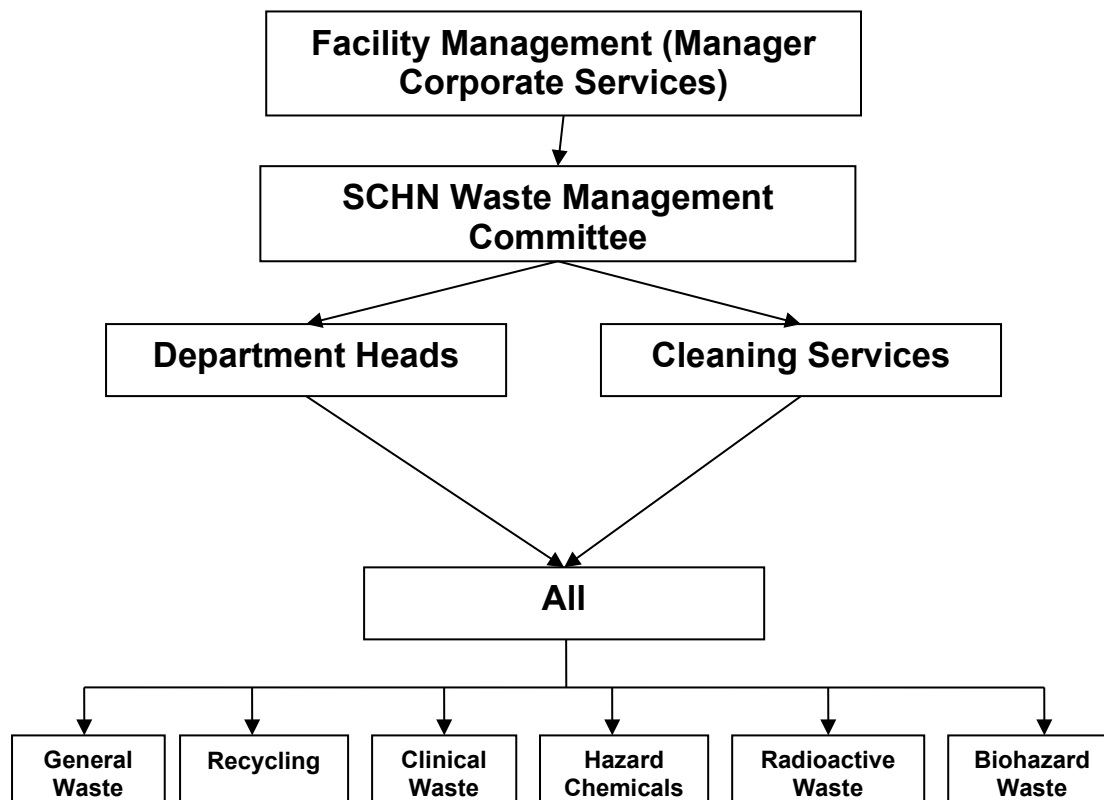
SCHN will comply with the guidelines issued by New South Wales Health, Clinical Excellence Commission, NSW Environmental Protection Authority and Office of Environment and Heritage, and the Work Health and Safety Act (2011), Work Health and Safety Regulations 2017, related Codes of Practice and Australian Standards.

These guidelines will outline the necessity to provide appropriate equipment, facilities, education, and training which will ensure that waste products are segregated, labelled, contained, transported, stored, and disposed of with care and consideration in a cost-effective manner which protects staff, the community and the environment.

Administration

Organisational Structure

The following organisational structure applies to the management of hospital waste:



Education, Training and Work Health and Safety

Waste Management Training Program

Waste Management information, education and training are part of the SCHN's Mandatory Training for all workers and must be completed at orientation. The purpose of this training is to minimise the risk of injury associated with waste handling and facilitate efficient waste management.

Waste handlers must be trained and equipped to undertake the handling, internal transport, spill management and storage requirements for the different types of waste generated.

All new workers including casual staff must be trained in waste management at commencement of employment during departmental orientation.

Departmental Work Health & Safety Training Programs shall include the following waste related topics:

- Manual handling
- Sharps/Needle stick injury
- Personal Protective Equipment (PPE)
- Waste Minimisation
- Waste Segregation
- Recycling
- Approved safe work practices.
- Vaccination program
- Waste streams / definitions
- Spill kits and management of spills

Continuous Improvement

The waste management committee will use performance indicators (listed below) to continuously monitor and improve waste management.

- Record and report on the cost and volume of waste
- Tracking of Clinical Waste
- Correct segregation of waste
- Waste audits
- Recycling and sustainable projects

Government Resource Efficiency Policy (GREP)

This policy aims to reduce the operating costs of NSW Government agencies and ensure leadership is provided in resource-productivity. GREP replaces the NSW Government Sustainability Policy. It also supersedes the Waste Reduction and Purchasing Policy (WRAPP) and contains [new waste reporting requirements](#). The requirements of GREP have been incorporated into the SCHN Waste Management Policy and Waste Management Action Plan.

Health Agencies are encouraged to continually improve their waste efficiency through:

- using the integrated waste management contracts
- creating an agency-specific waste reduction plan to target key waste streams that can be reduced or redirected from landfill.
- improving separation of recyclable materials out of the general waste stream (e.g.: organics, natural excavated material)
- introducing paper reduction targets and electronic file management systems
- recycling waste products where there is access to a national voluntary stewardship scheme.
- Identifying re-use opportunities of resources (e.g., furniture and office items, medical equipment and supplies, catering items)

Purchasing and Procurement

SCHN should take into consideration Waste Management issues when purchasing equipment / items or when tendering contracts and agreements. Considerations should include:

- Minimisation of Waste Residuals
- Environmental Impact
- Recycled Material content
- End of life/closed loop solutions
- Packaging Materials
- Returnable Materials

Waste Streams and Definitions of Waste

A waste stream describes the flow of a category of waste from generation to its end point of treatment / disposal or utilisation. This section gives an overview of the waste streams present throughout SCHN.

Clinical Waste

Clinical Waste is a waste that has been generated by medical, nursing, dental, veterinary, pharmaceutical, research or other clinical activity. (Refer to [Waste Disposal Table](#) for more examples). Clinical waste has the potential to cause sharps injury, infection or offence.

Therefore, **sharps must never be placed in waste bags they must be disposed of in sharps containers.**

The cost of handling clinical waste is considerably greater than the cost of other waste, and with a waste minimisation commitment the following items are a guide.

Pharmaceutical Waste

- Consists of any discarded drugs or pharmaceutical waste generated in manufacture, filters from laminar flow cabinets and packaging contaminated by pharmaceutical products including expired or discarded pharmaceuticals.
- Pharmaceutical waste awaiting disposal should be stored in the same manner as pharmaceuticals in use. Pharmaceuticals waste should be placed in non-reactive containers and should not be discarded to the sewer or any manner where they may find their way into the environment.

Cytotoxic Waste

- Consists of any residual cytotoxic medication following patient treatment and materials or equipment associated with the preparation, transport or administration of cytotoxic medication therapy. (Refer to [Waste Disposal Table](#) for more examples)
- For more information, refer to [Hazardous and Cytotoxic Medications - Administration and Handling Practice Guideline](#).

Chemical Waste - hazardous and non- hazardous

- Chemical waste is generated from the use of chemicals in medical applications, domestic services, maintenance, laboratories, during the sterilisation process and research. Reference should be made to the Safety Data Sheet which is provided with chemicals from the manufacturer and supplier for handling precautions, spill management, disposal and personal protective equipment.
- The Environment Protection Authority (<http://www.epa.nsw.gov.au/waste/hazardous-liquids.htm>) can be contacted for information regarding waste disposal of specific chemicals. Reference should also be made to the Australian Code for transport of dangerous goods by road or rail.

Radioactive Waste

- Radioactive Waste is material contaminated with radioactivity which arise from medical or research use. It may be in solid or liquid form and may be included in the body waste of patients under treatment.
- Radioactive Waste is to be identified by the internationally recognised colour red and black radioactive symbol (trefoil)

Hazardous Waste

- Reference should be made to the Safety Data Sheet (SDS) and the label on the container which provides information on safety precautions, disposal and personal protective equipment. A manufacturer or importer of a substance supplied for use at work shall determine whether the substance is a hazardous substance.

Biohazard Waste

Genetically Modified Material

- Guidelines for handling genetically modified material are developed by the Office of Gene Technology (OGTR) and are enforced by the responsible Institutional Biosafety Committee. Genetically modified material is any material used in genetic manipulation for research or clinical applications. Waste may be solid or liquid and includes any material used in the construction and/ or propagation of viroids, viruses, plasmids, cells or organisms of novel genotype produced by genetic manipulation that are either unlikely to occur in nature or likely to pose a hazard to public health or to the environment.

Imported Biological Materials

- SCHN is registered with the Australian Government, Department of Agriculture and Water Recourses, in order to import and use biological materials. The following conditions apply **only** to biological material imported directly into the Australia with a specific permit. Biological material purchased within Australia **does not** fall into this category, **unless** it is to be used in **non-laboratory** animals, in which case the conditions apply.

Conditions of registration require:

- That each user keeps a detailed record of the receipt, use, denatured and disposal of imported biological materials.
- That imported biological materials are disposed of by incineration;
- SCHN nominates a specific person as being responsible for waste management;

The first condition requires each Department to keep a detailed log in which the required information is recorded.

The second condition is satisfied by ensuring that all waste which may be contaminated with imported biological materials is discarded into the Contaminated Waste Stream (i.e. yellow bags and/ or bins). This is still required even if the material is denatured before disposal.

The third condition has been met by appointing the Corporate Services Manager as the SCHN nominee responsible for Waste Management.

Note: Departmental Managers should be aware that AQIS Inspectors may conduct audits of departmental records, without notice. Failure to produce adequate records may jeopardise AQIS registration and National Association of Testing Authorities (NATA) registration.

Microbiological Waste

- Microbiological Waste created by microbial, or tissue culture is autoclaved by the user before disposal into the contaminated waste stream. Refer to Microbiology policy and procedures Manual.

General Waste

Any waste which is assessed and or classified as inert or solid waste by the Waste regulation or Waste guidelines, and is not capable of being composed, recycled, reprocessed, or re-used.

Recyclable Products

Items which are composed of materials or components, capable of being remanufactured such as:

- Packaging, paper and cardboard: all packaging, paper and cardboard is kept separate from waste streams and where suitable in the recycling program. (Refer to [Waste Disposal Table](#) for more examples)
- **Plastic products:** waste plastic not included in clinical and related waste category is regarded as household waste. Some plastic may be recyclable. (Refer to [Waste Disposal Table](#) for more examples)
- **Glass waste:** not included in clinical and related waste category is regarded as household waste and where suitable placed in the recycling program. (Refer to [Waste Disposal Table](#) for more examples)

Liquid waste

- **Grease trap:** this waste is confined in the grease trap holding tank and is disposed of by a waste contractor in accordance with Sydney Water Agreement.

Organic Products Waste

- Includes wood, garden, food, vegetable and natural fibrous material waste and bio-solids.

Confidential Material Waste

- Any document with identifiable personal information or other details are deemed confidential material. Such material includes nursing handover sheets and information printed from computers such as discharge summaries and pathology/ radiology results. Health Care Records must be confidentially destroyed in accordance with the Health Records and Information Privacy Act 2022 and State Records' guidelines. Any other document marked confidential or considered to be meant for restricted access is to be disposed of as confidential material.

Waste Minimisation

Introduction

Waste products should be minimised by rational use of disposable products only where it is not possible or cost effective to thoroughly clean, disinfect and sterilise equipment for re-use in a safe, effective manner.

The cost of waste handling and disposal of the product and its packaging must be included in any study of the value of a disposable product.

Avoidance

Review housekeeping and purchasing policies to avoid excessive waste without compromising work standards or environmental outcomes.

Simple product modifications to minimise waste streams include requesting the manufacturer and supplier and/or Central Sterile Service Department to remove unnecessary materials supplied in sterile procedures packs.

This may include requesting the manufacturer and supplier to reduce unnecessary packaging or replace polystyrene foam with recyclable or biodegradable fillers.

Reduction

Reduction can also be achieved through product substitution, product modifications and procedural changes.

Product Substitution

Products should be assessed prior to purchase in terms of their potential to generate problematic waste, result in toxic emissions, or be detrimental to the operation and maintenance of treatment facilities.

Product assessment can be achieved through:

- evaluating product Manufacturer/Supplier Safety Data Sheets (SDS's);
- liaisons with manufacturers and suppliers to determine the composition of the product and potential waste output;
- seeking technical waste disposal advice from consultants or relevant authorities such as the EPA; and
- considering percentage of recycled materials used or recyclable components.

Product selection and purchase criteria should incorporate controls to ensure that less toxic/hazardous products are selected, without compromising product performance. Products such as polyvinyl chloride (PVC) plastic compounds should be progressively replaced by products made from ethylene vinyl acetate copolymers. Organic pigments should replace heavy metals pigments, commonly used for colouring waste bags and sharps containers.

Product substitution can often lead to cost effective solutions. The types of substitutes to be considered include biodegradable cleaning compounds and safer chemicals.

Product Modifications

Management should liaise and work with manufacturers / suppliers to change or modify products to incorporate both product performance and waste disposal. Where substitution cannot be achieved due to a limited range of products, management should approach manufacturers / suppliers to determine whether it is possible to change the product. There are many examples of product changes which set precedents e.g., change from solvent based products to water based; lead based paints to less hazardous alternatives. Manufacturers / suppliers have readily accepted these types of product changes without significant economic costs.

It is in the manufacturers and supplier's interest to meet industry needs as it places them at a significant commercial advantage compared to their competitors.

Procedural Changes

Simple changes to patient care procedures can be made to minimise generated waste. For example:

- where it is not necessary to use dressing packs for minor procedures e.g., removal of sutures, practitioners should use alternative equipment so the minimum amount of materials are used;
- when preparing for dressings, clean and sterile procedures, practitioners should critically assess materials required. When "setting up" unwanted extra materials should be removed for re-sterilisation or re-use. This should occur prior to commencing the procedure, therefore minimise the potential of contamination.
- small, colour coded containers should be accessible at the site of the procedure so that recyclable materials can be segregated.
- review frequency of waste collection, size and location of containers and bags.

Re-Use

Re-useable items should be preferred to disposable items whenever it is clinically appropriate, environmentally sound, practical and cost effective to do so. Do not discard items that may be feasibly reused, not including patient care items, or items that are contaminated with blood and/or body fluids.

Choose items which may be reused such as, pill cups, crockery, cutlery, and reusable kidney dishes and encourage staff to bring in their own coffee/tea mugs.

The cleaning and reprocessing of all reusable items must be considered.

Recycling

A large number of recyclable items are generated and should be separated for recycling. By separating recyclables quantities of Waste to landfill are reduced by up to 60%. Implementing recycling may see immediate cost reductions and increasing benefits in the future. As disposal volumes decrease, cost savings should increase.

Cost Effectiveness

Measure the cost and volumes (weight) of each waste stream using an audit process standardised against an activity level, for example occupied bed days, number of admissions/separations or kilograms per patient day.

Waste Segregation

What is segregation?

Waste segregation is the practice of classifying waste and placing it into the appropriate waste container immediately after waste is generated.

Waste products should be segregated from those that may be re-used or recycled by careful placement in designated bags or bins provided at the point of generation. Special arrangement will be made as required by the domestic services department.

Significance of Waste Segregation

Correctly segregate waste to protect personnel from injury and infection by preventing hazardous waste entering inappropriate waste streams.

Effective segregation can be achieved through:

- Providing education and training programs to all workers who generate or handle waste.
- Establish identifiable colour coding and labelling of waste containers.
- Provide suitable waste container and suitable locations.
- Ensuring all waste can easily, safely and correctly segregated at the point of generation.

Waste Handling, Labelling, Containment, Transport and Storage

Refer to Section 2.3 Management of waste in the NSW Health Policy Directive PD2020_049 [Clinical and Related Waste Management for Health Services](#)

Office Areas and General Waste

SCHN will continue to implement efficient waste handling practices. General waste bins are not permitted within each office or workstation as they are often incorrectly used for paper which should be recycled and cleaning time to empty these bins on a daily basis is very inefficient. Food should be preferably consumed in either the staff cafeteria or local tea rooms, if they are consumed in office areas the staff concerned should dispose of the waste in the nearest kitchen general waste bin. This waste management efficiency has already effectively been implemented in several areas of SCHN and the cleaning resources within Cleaning Services Departments then utilised in expanded clinical areas of the hospital without increasing labour costs. If staff want to retain the General Waste bin in office areas, then responsibility to empty these resides with the local staff.

Handling

Staff likely to be handling waste products should be vaccinated against Hepatitis B. Vaccinations can be arranged through the SCHN Staff Health Services. Protective clothing, eg: gloves are to be used by staff handling waste bags and bins. Plastic bags for household and hazard waste must be tied securely, lifted by the top and placed in the holding area for collection.

Waste Handlers must be trained and equipped to undertake waste handling, transport, spill management, blood and body fluid exposure management and waste storage requirements.

Handling of Waste Bags

Sharps must never be placed in waste bags they must be disposed of in sharps containers. Waste must be contained in colour coded and labelled plastic bags. Waste collection times should be routine. All waste bags must be held away from the body by the closed top of bag and placed directly into a mobile waste bin. Where waste bags are sealed and awaiting collection they should be in a secure place with restricted access.

Internal Waste Transport

Waste management in conjunction with Cleaning Services will conduct review of internal waste transportation to optimise the waste transport process and to promote safe work practices.

Clinical Waste: is to be transported in the approved rigid containers (yellow) with lids, locked, bar-coded and taken along a route that gives minimum exposure to the public and maximum safety to staff.

General Waste: is to be transported in the designated bins with due care taken to avoid overloading. Routes should be planned to avoid contact with the general public as much as possible. Bins are to be cleaned thoroughly and regularly by the waste handling staff.

Confidential Document Waste: is to be transported in approved rigid containers, suitably labelled and secured at all times.

Radioactive Waste: Waste should be taken by the most direct route possible to the Hospital Radioactive Waste Store, Level 1 Clinical Sciences Building, where the Radiation Safety Officer will allow access to the store. At no stage are Cleaning Services Staff to be involved in the transport of radioactive waste.

Hazardous Waste: when transporting these substances around the hospital, they must be accompanied by a SDS, clearly labelled and contained in an appropriate container. Waste originators are to be responsible for transportation of waste from the waste source to the waste holding area.

Biohazard Waste: Waste should be treated by the user department (autoclave/denatured) and then disposed of as contaminated waste.

Waste Labelling

Yellow Bins	SHARPS ONLY Black biohazard symbol 	All sharp objects
Lilac/Purple Bags and Bins	Cytotoxic Symbol 	All cytotoxic substance or items contaminated by them.
Red Bags	Black Radioactive Symbol 	All radioactive items as directed by the Radiation Safety Officer
General Waste	Disposable Nappies and General Waste	All non-recyclable waste
Recycling Bins	Recyclable symbol 	Paper and Cardboard Glass, Aluminium Cans, plastic bottles.
Confidential Documents	Locked Bin	Any document with patient, and /or staff information

Tracking

- All clinical bins of waste must be marked to identify the ward or area of collection.
- The disposal of *radioactive waste* is the responsibility of the Department Manager in discussion with the Radiation Safety Officer. Once the waste is no longer considered radioactive the Radiation Officer will contact Cleaning Services for disposal.

Storage


- All waste will be placed in designated holding rooms to await collection; no rubbish is to be left in any public access areas. Waste is then transported to the enclosed secure storage area and compacters for disposal.

Waste Disposal

CHW waste poster guide: Refer to the [Recycling at CHW](#) intranet page.

SCH waste poster guide: Refer to the [Recycling at SCH](#) intranet page.

Waste Stream	Items of Waste	Methods of Disposal
Clinical Waste	<ul style="list-style-type: none"> • Syringes (No Needles) • Disposable gloves (Blood stained or if used in Laboratories) • Bulk blood and blood products • Dressings heavily soiled with blood • IV cannulas • Pharmaceutical waste • GMO Waste - labelled • Pathology slides • Sealed disposable sharp containers • Disposable material and equipment soiled with or containing blood • human tissue, blood, visibly blood stained fluids and visibly blood stained disposable material/equipment • solid materials contaminated with blood stained urine or faeces (excluding nappies) • laboratory specimens, cultures and materials • tissues, carcasses or other waste arising from animals used for laboratory investigation or for medical or veterinary research. • Parts of the human body that can still be recognised as such (including products of conception but excluding teeth, hair and nails). • Sharps: (must be disposed of in Sharps containers) Any object capable of inflicting a penetrating injury, which may or may not be contaminated with blood and or body substances. This includes needles and any other sharp object or instruments designed to perform penetrating procedures. 	Yellow Wheelie Bin (CHW & SCH)
Cytotoxic Waste	<ul style="list-style-type: none"> • Cytotoxic pharmaceuticals • Sharps and syringe, ampoules and vials • Intravenous infusion and containers • Dressing, bandages, nappies, incontinence aids and ostomy bags • Contaminated personal protective equipment • Empty cytotoxic drug bottles • Sharps: (must be disposed of in Sharps containers) Any object capable of inflicting a penetrating injury, which may or may not be contaminated with blood and or body substances. This includes needles and any other sharp object or instruments designed to perform penetrating procedures. 	Purple Wheelie Bin (CHW & SCH)
General Waste	<ul style="list-style-type: none"> • Household waste - paper products not suitable for recycling, flowers, used disposable products which are not soiled with blood or body fluids, or any other clinical and related waste, are placed in opaque bags. 	Grey bin pedal bins with red lid lined with clear plastic bag (CHW)

	<ul style="list-style-type: none"> • Kitchen waste (food waste) - food and general waste from catering department. • ALL disposable nappies • Disposable gloves except from PC2 labs • Medical packaging • IV burettes and giving sets which are not heavily blood stained or contaminated with hazardous medications • Enteral feed giving sets which are not contaminated with hazardous medications • Tissues • Dressing packs • Day-Lee wipes • Flowers • Food scraps • Waxed coffee cups 	<p>Metal office bins lined with clear bag (CHW)</p> <p>Green wheelie bins with red lid (CHW & SCH)</p> <p>Red office bins lined with clear bag (SCH)</p>
<p>Recycling – Paper and cardboard</p>	<ul style="list-style-type: none"> • Handtowel Paper • All paper items such as: <ul style="list-style-type: none"> ○ Magazines ○ Newspapers ○ Greeting cards ○ Cardboard ○ Envelopes ○ Manilla folders ○ Brochures ○ Phone books ○ Paper binder dividers 	<p>Grey pedal bin with blue lid</p> <p>Cardboard recycling boxes</p> <p>Green wheelie bin with blue lid</p> <p>Blue wheelie bin (SCH)</p>
<p>Recycling – commingled</p>	<ul style="list-style-type: none"> • Glass bottles • Empty milk cartons or bottles • Plastics eg: take away containers • Aluminium cans • Steel cans • Plastic bottles 	<p>Green wheelie bin with yellow lid</p> <p>Orange/Brown wheelie bin (SCH)</p>
<p>Recycling PVC</p>	<ul style="list-style-type: none"> • Oxygen masks • Oxygen tubing • IV fluid bags • Suction tubing 	<p>Green wheelie bin with white lid</p> <p>White wheelie bin with green lid (SCH)</p>
<p>Confidential waste</p>	<ul style="list-style-type: none"> • Any items that identifies the hospital, staff and patients 	<p>Lockable Blue wheelie bin with white lid</p> <p>Dark Blue lockable wheelie bin with white lid (SCH)</p>
<p>E-Waste</p>	<ul style="list-style-type: none"> • IT hardware and accessories Batteries • Mobile phones • Toner cartridges • Light globes • Batteries 	<p>CHW – Refer to SCHN intranet</p> <p>SCH - Refer to SCHN Intranet</p>

Trade Waste	<ul style="list-style-type: none">• Building waste• Green waste• Obsolete furniture and equipment	Open skip bin
Metal recycling	<ul style="list-style-type: none">• Stainless steel items• Appliances• Obsolete metal furniture and equipment	Open skip bin

External Waste Disposal

- **Clinical Waste:** is disposed by the NSW Health appointed external contractor.
- **General Waste:** General Waste is disposed of by The Sydney Children's Hospital Network appointed contractors.
- **Confidential Document Waste:** documents can be disposed on in the following manner:
 - Shredded into the clear plastic bags under the shredding machine.
 - Placed in locked bins designed and labelled for disposal of confidential material. When the bin is full contact Cleaning Services to arrange for the bin to be replaced. The bins are replaced every Friday by an external contractor.
Note: There is a high cost associated with disposal of confidential material. Material that is not considered confidential must be disposed of as general waste or where possible recycled with paper waste.
- **Recycling:** material is removed by the SCHN appointed contractor. Contact names and phone numbers are available from the Cleaning Services Departments.
- **Radioactive Waste:** material is removed as contaminated waste following instruction from the Hospitals Radiation Safety Officer. Transfer arrangements should be made through the hospitals Radiation Safety Officer.
- **Hazardous Waste:** Please refer to [SCHN Procedure Hazardous Chemicals](#).
- **Biohazard Waste:** Waste should be sterilised on site by steam autoclaving. Temperatures must reach 121°C for 20 minutes. Following sterilisation, waste should be discarded as contaminated waste.

Auditing of Waste

A survey of all waste products will be performed on a regular basis by the Waste Management Committee. Specific audits of contents of containers in a particular waste stream will be undertaken to assess compliance with the hospital requirements for waste minimisation, segregation and recycling.

The audit will give indication of:

- Types and quantities of waste generated
- Sources and composition of waste
- Incident and accidents involving waste
- Segregation

Waste audit reports will be tabled and discussed at the SCHN Waste Management Committee.

Workplace Health and Safety

The management of waste presents a number of potential hazards to workers requiring the appropriate measure of risk identification, risk assessment, and risk control. Workers have an obligation to follow instruction regarding safe work practices relating to handling, transport, storage or disposal of waste.

Employers Responsibility

SCHN management is responsible under the Work Health and Safety Act (2011) for providing appropriate information, education, training and instruction and ensuring that safe systems of work are developed and maintained.

Worker's Responsibilities

All workers are to comply with SCHN policies and procedures which provide instructions for protection of their own health and safety and the safety of others. This includes the correct use of Personal Protective Equipment (PPE) and manual handling.

Monitoring Performance

Operating and waste treatment and disposal costs should be reviewed periodically to evaluate any fluctuations in volumes and costs. As part of the NSW Health Work Health & Safety Audit, waste management systems should be monitored and areas audited for segregation of waste.

Hygiene

Includes regularly washing and maintaining waste bins and equipment used for waste transportation and storage by Cleaning Services Staff.

Provide hand washing facilities for workers and promote regular hand washing procedures to comply with the NSW Health Policy Directive Infection Prevention and Control Policy ([PD2017_013](#)) and [SCHN Hand Hygiene Policy](#).

Manual Handling

Collection and storage procedures should be streamlined to reduce manual handling effort and risks. Large loads such as mobile waste bin should be gripped by both hands and handled one at a time, avoid twisting your body during the manual handling of the bin. Wheeled bins should not be lifted. Also refer to [Manual Handling and Ergonomics Procedure](#) and [Risk Management Policy](#).

Personal Protective Equipment (PPE)

Personal Protective Equipment such as gloves, must be worn when handling or transporting waste to the waste holding area.

Spill Management

All hazardous substances and cytotoxic spill incidents must be reported on ims+ (electronic incident management system) to record the chemical hazard and if there is a direct exposure involving staff this must be recorded on ims+ as a worker affected incident notification.

Workers involved in the management of hazardous substances or cytotoxic spills must complete required training to ensure they are familiar with the spill management process and procedures, competent in the use of spill kits and have sound knowledge of the reporting process.

Radioactive Spill

1. If possible contain the spill.
2. Restrict access to the area.
3. Contact the Radiation Safety Officer (CHW) or Campus Radiation Safety Team (SCH) via switchboard
4. Await instructions from Radiation Safety Officer.
5. Record incident via ims+.

Note: Cleaning Services Staff do not clean radioactive spills.

Cytotoxic Spill

Any cytotoxic spill must be decontaminated immediately using appropriate spill kits available. If any of the drugs has been spilt on personnel, the first priority must be removal of the drug from the person by flushing the contaminated area with copious amounts of water for 15 to 20 minutes. In this case someone other than the affected operator should clean up the spill. Clean up spill in accordance with Department procedures.

Equipment

- Cytotoxic Spill Kit
- Sodium Hypochlorite (Domestos brand)

For more information refer to NSW WorkCover guide, "[Cytotoxic Drugs and Related Waste Risk Management Guide 2008](#)":

Cyclophosphamide exposure ^(1, 2, 3, 4, 17, 15) refer to [section 16.3](#).

Spills on Carpets

Powder:

1. Vacuum the powder residue with a disposable battery operated vacuum cleaner
2. Dispose of vacuum cleaner following this
3. Shampoo carpeted area and let dry

Liquid:

1. Clean up spill with disposable cloths
2. Dispose of cloths into purple/lilac bag
3. Saturate area with water
4. Soak up with towels
5. Dispose of towels into purple/lilac bag
6. Repeat step 3, 4 and 5 twice
7. Shampoo area and allow to dry

In the event of a cytotoxic spill where a worker is contaminated, staff members are to contact one of the following to arrange for assessment of exposure and as required pathology request (10mL of clotted blood and a urine sample, both to be collected in the morning after exposure.)

Contact should be in the following order:

1. SCHN Staff Health Nurse CHW -Ext: 53556 Page: 6238
SCH PH 98427951
CHESS POWH page 44186, ext 22859
Emergency Department/Doctor
2. Record) incident on ims+ <https://intranet.schn.health.nsw.gov.au/clinical-governance-unit/ims-resources>

3. SCH staff can make an appointment with Staff Health and Wellbeing by contacting SCHN-Staffhealthandwellbeing@health.nsw.gov.au.

Mercury Spill

The following procedure is to be used for minor spills less than 40ml, for larger spills the immediate work area must be evacuated and isolate the work area for appropriate emergency response, refer to the SCHN Emergency Procedures Guidelines – Chemical spill (Emergency Flip Chart). Departments that have items containing mercury should have an appropriate mercury spill kit, local documented procedures and staff trained to manage minor spills.

Note: Cleaning Services Staff do not clean mercury spills.

Notify the SCHN WHS Team for any mercury spill and contact Staff Health Team for any direct exposure to staff for assessment of health monitoring. Mercury vapours can be absorbed through the lungs into the bloodstream therefore particularly hazardous.

Use a mercury spill kit and PPE (rubber gloves, safety goggles and P2/N95 mask) for clean-up of the minor spill and secure the area to restrict access during cleaning up of the spill.

Contain the spill from spreading to other surfaces or into drains. Pick up all visible mercury droplets wearing PPE using a plastic scoop or a dustpan using rigid paper, gently transfer the spilt mercury droplets into an unbreakable plastic container, secure tight and place the container into another plastic container to provide additional containment protection. Place containers into a zip lock bag.

Never use a broom as this will scatter the mercury droplets and never use a vacuum that does not have hepa filtration. Close interior doors leading to other inside areas during containment and cleaning up of mercury spill. Avoid breathing any dust, vapours, mist, or gas and avoid contact with eyes, skin and clothing.

Never pour mercury down the drain as mercury is heavier than water, will accumulate in the S pipe and may continue to emit harmful vapours. It is also an environmental pollutant.

The mercury spill kit may be supplied with absorbent product or sprinkle fine powder sulfur or zinc on the spill site to bind any remaining mercury. Use a high intensity light to illuminate spill areas for clean-up of residual spilled mercury.

Ventilate the affected area after spill has been cleaned up. Consult with site Engineering /Maintenance department for air circulation strategies. For larger size spills it may be necessary to test mercury vapour levels in the immediate area by an occupational hygienist.

All contaminated items must be double bagged and disposed of according to site hazardous waste procedures.

Replace broken device with a 'Mercury-Free' alternative.

Hazardous Spill including chemical and biological

Emergency procedures will be based on the product classification and the information provided in the SDS. In all cases the emphasis must be on life safety and to confine the hazard to the immediate incident area. Emergency response decisions must also take into account potential environmental damage (e.g., avoid liquid spills entering the drainage system). For Genetically Modified Organism (GMO) product spills, refer to [Transport, Waste and Spill Management of Medicinal Products containing GMOs Procedure](#).

Points of contact

The point of contacts are as follows:

- Waste Management – Corporate Services Manager.
- Radioactive Waste - Radiation and Laser Safety Officer
- Point of escalation for Waste Management is Manager Corporate Services

Further information is also available on the intranet:

- [CHW – Refer to SCHN intranet](#)
- [SCH - Refer to SCHN Intranet](#)

References

1. NSW Health Policy Directive Infection Prevention and Control Policy (PD2017_013):
https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2017_013.pdf (accessed Jan 2023).
2. Work Health and Safety Act 2011 <https://legislation.nsw.gov.au/view/html/inforce/current/act-2011-010>
(accessed Jan 2023)
3. Work Health and Safety Regulation 2017 <https://legislation.nsw.gov.au/view/html/inforce/current/sl-2017-0404> (accessed Jan 2023)
4. Clinical and Related Waste Management for Health Services, 2017
https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2017_026.pdf (accessed Jan 2023)
5. Environment Protection Authority <http://www.epa.nsw.gov.au/wasteregulation/index.htm> (accessed Jan 2023)
6. NSW Government Resource Efficiency Policy (GREP)
<https://www.environment.nsw.gov.au/resources/government/140567NSWGREP.pdf> (accessed Jan 2023)
7. Cytotoxic Drugs and Related Waste – Risk Management 2017. SafeWork NSW:
http://www.safework.nsw.gov.au/_data/assets/pdf_file/0005/287042/SW08559-Cytotoxic-drugs-and-related-risk-management-guide.pdf (accessed 22/06/23)

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