



**Norwest**  
PRIVATE HOSPITAL

# WASTE MANAGEMENT PLAN

## **Mission Statement**

*Norwest Private Hospital is committed to maintaining a waste management system that is safe, efficient, cost effective and considers environmental issues.*

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August 2009

## CONTENTS

Introduction	3
Aims	
Objectives	4
SECTION 2 - Definitions	5
Clinical waste	5
Cytotoxic Waste	5
Pharmaceutical Waste	5
Chemical Waste	5
Radioactive Products	5
SECTION 3 - Organisational Issues	7
Employer's Legal responsibilities	7
Employees Responsibilities	7
Licensing Requirements	7
Waste Management Committee	7
Purchasing Policy	9
Product Evaluation	10
Education and training	12
SECTION 4- Waste Management Strategies	13
Waste Minimisation	13
Reuse Strategy	13
Waste Reduction	13
Recycling	13
Audits	14
SECTION 5 - Waste Handling, Containment and Transport	
Waste Handling	15
Waste Classification	16
General Waste Audit Form	17
Personal Protective Equipment (PPE)	18
Transporters and Contractors	20

## Introduction

This Waste Management Plan describes the current policies and procedures for Norwest Private Hospital. It provides goals & target to ensure ongoing improvements in all aspects of waste management, including the generation, handling, storage and disposal of all forms of waste. This facility is committed to minimising waste, in accordance with the NSW Government Waste Reduction and Purchasing Policy.

### Aims

- To protect public health and safety.
- To provide a safe work environment
- To minimize the environmental impact of waste generation treatment & disposal.
- Reduce waste handling & disposal volumes/costs without compromising health care.

### Objectives

- To adopt and implement the Waste Management Plan throughout the hospital.
- To monitor performance and review the Waste Management Plan at least annually.
- Adopt a waste minimization policy which incorporates realistic purchasing guidelines.
- Develop concise waste segregation principles and promote practical guidelines for re-usable products.
- Foster commitment from all staff and management to actively participate in waste avoidance, reduction, reuse and recycling programs.
- Introduce a continuing waste management education program for all staff to increase awareness of Occupational Health & Safety issues and waste minimization principles.
- Adopt policies and procedures to minimize the environmental impact of waste treatment and disposal.

## DEFINITIONS

### Clinical Waste

Clinical waste is waste which has the potential to cause sharps injury, infection or offence. When packaged and disposed of appropriately, there is virtually no public health significance. Clinical waste contains the following:

- Sharps (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 objects or instruments designed to perform penetrating procedures).
- Human tissue (excluding hair, teeth and nails);
- Bulk body fluids and blood (Free flowing liquids normally contained within a disposable vessel or tubing, not capable of being safely drained to the sewer).
- Visibly blood stained body fluids and visibly blood stained disposable material and equipment;
- Laboratory specimens and cultures;
- Animal tissues, carcasses or other waste arising from laboratory investigation or for medical or veterinary research.

### Cytotoxic Waste

Cytotoxic waste means material contaminated with residues or preparations containing materials toxic to cells, principally through action on cell reproduction. This includes any residual cytotoxic drug, and any discarded material associated with the preparation or administration of cytotoxic drugs.

### Pharmaceutical Waste

Consists of pharmaceuticals or other chemical substances specified in the Poisons List under the Poisons and Therapeutic Goods Act 1966. Pharmaceutical substances include expired or discarded pharmaceuticals, filters or other materials contaminated by pharmaceutical products.

### Chemical Waste

Chemical waste is generated from the use of chemicals in medical applications, domestic services, maintenance, laboratories, during sterilization processes and research. It includes mercury, cyanide, azide, formalin, and glutaraldehyde, which are subject to special disposal requirements. Chemical wastes included in the Dangerous Goods Regulations and Poisons and Therapeutic Goods Act are also included in this stream.

### Radioactive Waste

Radioactive waste is material contaminated with radioactive substances which arises from medical or research use of radionuclides. It is produced for example, during nuclear medicine, radio immunoassay and bacteriological procedures, and may be in a solid liquid or gaseous form and includes the body waste of patients under treatment.

### Recyclable Products

Items which are composed of materials or components, capable of being remanufactured or reused.

### Organic Products

This includes wood, garden waste, food and vegetable scraps and natural fibrous material which are biodegradable.

**Liquid Waste**

Liquid wastes are defined in the Waste Regulation. These wastes include grease trap waste, used lubricating oil and waste normally discharged to the sewer.

**General Waste**

Any waste not included above. Which is not capable of being composted, recycled, reprocessed or re-used. This stream includes incontinence pads, sanitary waste and disposable nappies.



## ORGANISATIONAL ISSUES

Norwest Private Hospital serves Bella Vista and surrounding areas  
The hospital has a total of 171 beds comprising.

### Employer's Legal responsibilities

Employers have a number of legal responsibilities which include:

- developing and maintaining a safe work environment and safe work practices (Occupational Health & Safety Act, 2000);
- ensuring hospital activities do not breach environmental standards prescribed in the State and Federal legislation;
- providing staff training and education for the safe handling of waste.

### Employees Responsibilities

Employees also have responsibilities which include:

- complying with safety instructions and use safe work practices for their own protection and for the protection other staff and the public (Occupational Health & Safety Act, 2000).
- Actively supporting environmental initiatives introduced by the Waste Management Committee.
- Be aware and comply with the requirements for the handling of chemical substances according to Material Safety Data Sheets (MSDS).

### Licensing Requirements

A copy of the liscence is held by the General Manager

### Waste Management Committee

Waste issues discussed at OHS and Infection Control Committee's.

*Table 1: Waste Management Committee Members*

Position	Name	Responsibility
OH&S Coordinator	George Lebnan	Minute keeping. Advice on OH&S Matters. Liaison with Council. Advise on disposal issues and services external to the hospital. Independent Audits of the hospital. Provide non-clinical related waste training for all relevant staff.
Infection control	Kathy McDowell	Advise on infection control issues. Liaison with the infection control committee. Provide clinical related waste training for all relevant staff.
Hotel Services	Stephen Jayawardene	Supervision of Catering & cleaning staff . Maintain daily records of waste generation.

Table 2: Objectives of the Waste Management Committee

<b>Committee Objectives</b>
Seek a commitment from Management to comply with all relevant Legislation (Appendix 2)
Consult with Management on waste handling & storage issues relating to the design and layout of buildings, renovations & extensions
Conduct a waste audit and prepare a comprehensive report of current waste generation, segregation, handling, storage and disposal practices and costs
Develop OH&S strategies for injury prevention, and for reporting, treating and follow up of injuries associated with waste handling
Provide appropriate Personal Protective equipment and offer staff vaccinations
Develop spill management strategies for all waste categories
Implement an ongoing waste management training program which caters for all staff including management.
Implement a waste avoidance & minimisation program incorporating the Waste Reduction & Purchasing Policy [WRAOO – refer to Table 3]
Implement a Recycling program and increase recycling by at least 50% in the first year (Table 4)
Promote waste management principles throughout hospital (signs, posters, notice boards, bulletins, competitions etc)
Improve waste segregation practices (increase compliance by 50% in the first year (Tables 5, 6 & 7)
Liaise with council, private waste contractors and Area Health Services with regard to the transport and disposal of waste external to the hospital.
Conduct a Waste Management Numerical Profile Audit annually and review the Waste management Plan
Conduct ongoing audits of waste (refer Section 4.1). Ensure information is relayed to staff

## PURCHASING POLICY

### Philosophy

Both the Supply/Purchasing Department and the Product Evaluation Committee are committed to waste avoidance and waste minimisation. Where the use of disposable products is unavoidable, their environmental impact should be assessed. In addition to infection control, occupational health & safety, value for money, and environmental concerns will be taken into consideration when evaluating products. Existing research and evaluation information from other hospitals/Areas will also be considered.

Preference shall be given to products and packaging which are:-

- manufactured from recycled raw materials (provided they are cost/performance competitive)\*
- manufactured from renewable resources
- re-usable (particularly non clinical products)
- totally or partially recyclable or with recyclable components, eg toner cartridges, provided however that collection & recycling facilities are available.

\* Where recycled products are rejected due to inferior performance, the manufacturer or supplier shall be provided with adequate feedback, and encouraged to improve the quality, performance and reliability of the product.

Where appropriate, tender documents shall require manufacturers, suppliers and distributors to :

- correctly specify the materials used (MSDS), their origin, the recommended method of disposal/re-use/recycling, and the likely impact on the environment.
- avoid the use of materials known to be toxic to the environment including chlorofluorocarbon (CFC) products and/or byproducts, phosphates and heavy metals.
- keep packaging to the minimum necessary for the safe transport and delivery of the product.
- specify whether packaging is recycled, recyclable, re-usable or biodegradable.
- accept return of used packaging.
- clearly specify the energy rating on appropriate appliances and fittings.

Where appropriate and cost effective, re-usable items should be purchased in preference to non re-usable items. Items which are intended for re-use should be able to withstand the appropriate cleaning, disinfection or sterilisation process. Products should be supplied with detailed manuals outlining cleaning procedures.

When comparing re-usable items with non-re-usable items, a life cycle analysis should be conducted and should include (but not be limited to):-

- product cost
- product lifecycle analysis
- labour
- transport
- cleaning
- energy (gas electricity etc)
- water
- disposal
- maintenance

Table 3: Product Evaluation

..... Date:...../...../19.....

*{\* Add or delete as appropriate}*

Product	In Contract Y/N	Cost Center/ Department	Quantity/ Year	Cost/ Year	Recycled %	% Capable of using recycled or recyclable components	Recyclable	Disposable	Reusable Alternative Available	
							Market Available? Y/N	Bio- degradable %	Y/N	Cost \$*
Photocopy paper	Yes								NA	NA
Office communication paper	Yes								NA	NA
Office stationary	Yes								NA	NA
Computer paper	Yes								NA	NA
Photocopiers	Yes								NA	NA
Printers	Yes								NA	NA
Facsimile	Yes								NA	NA
Toner Cartridges	Yes								NA	NA
Other									NA	NA
									NA	NA
									NA	NA



## Education and Training

The Norwest Private hospital has compiled an education package covering the knowledge and application of the core principals for waste management.

The Infection Control Coordinator is the person responsible for coordinating and running training activities. Orientation courses for new employees and refresher courses are to be run whenever there is a change in process, and / or at least annually.

A register of course attendance is held by the Nurse Educator

Norwest Private hospital has compiled an education plan for this facility that incorporates sessions to:

- Senior management
- Current Employees
- New Employees (orientation)

The following topics are to be covered by all staff:

- Safe work practices
- Staff awareness of policies at orientation
- Legislation & licensing
- Provision and safe use of PPE
- Infection Control and Hygiene procedures
- Waste stream definitions
- Costs and benefits of waste minimisation
- Reduce/reuse/recycle
- First aid / needlestick injury
- Spill management
- Manual handling
- Environmental impacts of waste disposal

## Waste Management Strategies

### Waste Minimisation

#### Reuse Strategy

It is the policy of Norwest Private Hospital that single use items shall not be reused under any circumstances.

Reusable items should be purchased where appropriate to encourage waste minimisation.

#### Waste Reduction

Initiatives for Waste reduction to be encouraged

#### Recycling

The following Table 4 refers to the recycling program.

## Audits

Auditing is an essential management tool for measuring the level of compliance with the Waste Management Guidelines.

### Segregation Audit

Both clinical waste and general waste should be inspected to accurately determine the level of segregation. Other categories of waste and recyclable materials can also be audited (except hazardous, cytotoxic and radioactive waste).

#### Requirements

The Audit should be carried out in a well ventilated, well-lit area with smooth, impervious floors. A stainless steel table or suitable platform such as a mortuary table with elevated sides to retain liquids should be used to sort waste. Hand washing facilities should be available.

Staff performing the audit should wear adequate personal protective equipment AND should be adequately vaccinated (including Hepatitis B). A note taker will be required to record and take photographs if necessary. Photographs or video recordings can be valuable in illustrating and highlighting problem areas.

Ensure that the origin of the waste is clearly identified by name (ie theatre, Ward name).

#### Procedure

A minimum of 10% of all bags should be selected at random for inspection.

First record the weight of each bag/container on the audit form (attached). Carefully open the bag and place each item into the appropriate category (Clinical, General or Recyclable - refer to the attached guide to the classification of waste). Re-weigh each category and record the results on the audit form. Total each column and calculate the percentage of Clinical waste, general waste and recyclable material.

Clinical Waste Audit – this is carried out by Sterihealth

CATEGORY	ITEMS OF WASTE	RECEPTACLE	RECEPTACLE LOCATED	TRANSPORTED TO STORAGE BY	HOSPITAL STORAGE	END DISPOSAL
Clinical - Anatomical	Identifiable Body parts eg, limbs, placentas, titanium prothesis	Burgundy mobile garbage bin	Dirty areas eg pan room, Birth Suite and Theatres	Housekeeping	Into locked Waste area back carpark	Collected for treatment by Sterihealth
Clinical	IV tubing contaminated with blood. Dressing materials, wound drains. Medication vials. Gloves, paper towels heavily contaminated with blood.	Yellow Bin with yellow plastic liner (biohazard symbol on bag)	Dirty areas eg pan room, clean up areas	Housekeeping Ph. 469	Into locked Waste area back carpark	Collected for treatment by Sterihealth
	IV Therapy set up (IV, bag, administration set and add ons and cannula) Syringes contaminated with blood.	Yellow Bin with yellow plastic liner (biohazard symbol on bag)	Dirty areas eg pan room, clean up areas			
Sharps	All "sharps" eg needles, spikes, scalpel blades, stitch cutters, syringes connected to needles.	Yellow "sharps" bins of various sizes – Australian standard	Treatment rooms, pan rooms, IV resuscitation trolleys, anaesthetic trolleys, clean up areas in OT, recovery areas, resus and consult rooms in ECC, laundry	Placed in large yellow clinical waste bin and collected by Housekeeping	Into locked clinical waste area back carpark	Collected for treatment by Sterihealth
General	All waste not heavily contaminated with blood, eg Sanitary / incontinence pads,	Bin with blue / black / clear plastic liner	Dirty areas eg pan rooms, clean up areas and locations in all departments	Housekeeping	Waste skip	Collected by contractors – Sita
General	Paper hand towels	Lined waste bins	Under each hand basin	Housekeeping	Waste skip	Collected by contractors – Sita
Recycling	Non medical glass and bottles, plastic bottles and cans	Specified open bin	Pan rooms and pantries, kitchen and courtyards	Housekeeping	Loading Dock	Contractor
	Cardboard	Staff fold down boxes	Stored stacked beside general waste bin			
	Aluminium cans	Specific bins	Courtyards, kitchen, pan room, dining room			
Recycling	Confidential papers, clean paper patient labels	Wheelie bins labelled, confidential paper waste	Office areas, Medical Records	Ward Clerk	Appropriate MGB	Wheelie bins collected by contractor and taken for shredding and recycling
Food scraps	Food scraps	Staff rooms, patient meal trays	kitchen	Catering staff	Nil	Bin - kitchen
Fats	Kitchen	Specified container		Catering staff		Contractor for appropriate recycling

## Waste Classifications For Waste Segregation Audit

Note: This list is not all inclusive.

Clinical	General	Recyclable
Bandages and dressings contaminated with blood.	Food scraps AND disposable food containers.	Glass.
Blood stained gloves.	Gloves (NOT stained with blood).	Paper.
Blood stained disposable surgical hardware.	Disposable food utensils.	Aluminium (cans, foil etc.,).
Used needles and syringes	Flowers.	Cardboard.
Used drainage and suction containers (full/empty).	Plastic bottles (non-recyclable).	Steel cans.
Theatre gowns soiled with blood.	Disused office supplies.	Milk cartons.
Bulk blood and body fluids (not capable of safe disposal to the sewer).	Sanitary pads.	PET (polyethylene tetrachloride) plastic bottles.
Treated pathology waste (used culture plates/tubes etc.).	Unused medical supplies.	HDPE (high density polyethylene) plastic bottles.
Heavily blood stained disposable blueys.	Blueys (not heavily blood stained).	Cooking oil and fats.
Heavily blood stained disposable napkins/incontinence pads.	Disposable napkins (NOT heavily blood stained).	Polypropylene bottles.
	Oxygen masks and tubing (clean).	X-ray film.
	Bed pan covers (clean).	
	Disposable sterile wraps.	
	Dressing / treatment trays.	
	Paper tissues and hand towels.	
	Wrappings / packaging.	
	Drained IV bags and tubing.	

# General Waste Audit Form

Waste Bag Origin	Total Weight (kg)	General		Clinical		Recyclable		Comments (a) General (b) Clinical (c) Recyclable
		Weight	%	Weight	%	Weight	%	
								a)
								b)
								c)
								a)
								b)
								c)
								a)
								b)
								c)
								a)
								b)
								c)
<b>TOTAL</b>								

Auditor: \_\_\_\_\_ Recorder: \_\_\_\_\_ Date.....

## WASTE HANDLING, CONTAINMENT AND TRANSPORT

Healthscope has an adequately trained team responsible for the handling, internal transport, spill management and disposal of clinical and related waste.

### Waste Handling

- Sharps are handled in accordance with guidelines in the Infection Control Manual.
- Manual handling is in accordance with the Healthscope Code of Practice for Manual Handling.
- Hand washing and hand care is in accordance with the Infection Control Policy.
- Management of needle stick injuries/body fluid exposure is in accordance with policy as detailed in the Infection Control Manual.

### Clinical Waste

- Clinical waste bins/bags are collected from wards by housekeeping staff and placed in the designated locked area.
- Clinical waste bags must be transported in a closed yellow clinical waste bin.

### Sharps Containers

- Healthscope provides purpose designed sharps containers to ensure a safe system of work.
- Sharps container/s used: BD manufacture.
- The containers are collected by Veolia.
- Containers comply with Australian Standard.

### Waste Bags

- Bags are not to be overfilled.
- Bags are to be held away from the body when being handled.
- Bags are to be sealed at the point of generation.

### Waste Trolleys and Mobile Garbage Bins (MGB's)

- The trolleys are used exclusively for waste transport.
- Trolleys should not be overfilled.
- The following procedures are followed when cleaning trolleys:
  - Thoroughly scrub trolleys and MGB's with pH neutral detergent and water and leave to dry
  - Cleaned trolleys and bins are stored separately from soiled containers
  - Appropriate personal protective equipment is to be worn when handling waste

## Mobile Garbage Bins For Clinical Waste

- Clinical waste mobile garbage bins are cleaned by the contractor.

## Holding Areas

- Clinical waste is stored in the Dirty Utility Rooms - with smooth impervious floor.
- The duration of storage is a maximum of 4 days.
- Water supply is available and there is suitable drainage to sewer. There is permanent natural ventilation and adequate lighting is provided. A spill kit is located in each dirty utility room.

## Personal Protective Equipment (PPE)

The following protective barriers are available:

- eye shields
- gloves
- gowns
- masks
- aprons

The PPE worn when handling the following types of waste are:

- general - gloves
- clinical - gloves and apron
- sharps - gloves and apron.
- Cytotoxic – gloves and apron

## Spill Management

- Spills from waste bags/bins shall be managed immediately according to the nature of the spill.
- Spill kits for clinical waste are kept in each clinical waste room, ward/unit pan rooms and theatre orderlies cleaning room.
- Spill kits for cytotoxic waste are kept in the Oncology Unit.

## Transport

- Compliance with EPA transportation requirements is managed by the contractors – Veolia, in accordance with the EPA's special conditions applicable to the transportation of trade waste being contaminated, wastes generated in hospitals, health institutions and medical laboratories.

## Transporters and Contractors

Waste Type	Name of Contractor and/or Transporter	Address	Contact Phone	Trade Waste License No	Destination
Clinical	Sterihealth	2 Wiblen Street, Silverwater NSW 2128	1300 66 77 87	006156	2 Wiblen Street, Silverwater NSW 2128
General	SITA Environmental Services	201-205 Newton Road, Wetherill Park NSW 2164	13 13 35		201-205 Newton Road, Wetherill Park NSW 2164
Cardboard	Cardboard King		0418 283 267		
Confidential Paper	Sherd-X	60D Perry Street, Matraville NSW	1300 888 420		
Sharps	BD Sharps (Supplier)  Sterihealth (Transporter)	4 Research Park Drive, Macquarie University Research Park, North Ryde NSW	1300 66 77 87	Sterihealth (006156).	2 Wiblen Street, Silverwater NSW 2128
Cytotoxic	Sterihealth	2 Wiblen Street, Silverwater NSW 2128	1300 66 77 87	006156	2 Wiblen Street, Silverwater NSW 2128
Grease Trap	Greasetrap Cleaning Services	24 Smith Street, Emu Plains NSW 2750	1800 442 442	4027	Kingswood NSW 2747
Hazardous Chemicals	N/A				

Waste Type	Name of Contractor and/or Transporter	Address	Contact Phone	Trade Waste License No	Destination
Pharmaceutical	N/A				
Mercury/ Amalgam	NA				
X-Ray Film	Siltech International P/L Mark Wallace	P.O. Box 6175, Frenches Forest	9453 0811		
Silver	Siltech International P/L Mark Wallace	P.O. Box 6175, Frenches Forest	9453 0811		
Print Cartridges	Close the loop limited	208 Hume Highway Somerton VIC 3062	T: 03 9930 8600 F: 03 9930 8695		

  

Hazardous Waste	Use	MSDS Available Yes/No	Storage Location	Disposal Method (Ie. sewer, landfill, incinerator etc)	Quantity & Frequency	Trade Waste License & Contractor receipt
Clinical Waste	Healthcare	No	Locked bins and storage area.	Shredded and landfill. (Incinerate)	Various each month.	Sterihealth (006156)
Greasetrap	Catering/ Cooking	No	Sealed pit.	Pumped out of pit and treated at contractors plant.	1500ltrs per month	Greasetrap Cleaning Services (4027)