

## Document Management

### Waste Management Policy Manual

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**SYDNEY WEST**

**Area Health Service**

*... committed to a sustainable future*

# **WASTE MANAGEMENT POLICY MANUAL**



**JANUARY 2008**

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## **1. Policy Statement**

Sydney West Area Health Service (SWAHS) is committed to reducing to the minimum level possible the waste generated in the normal course of pursuing a high standard of health care. Where waste generation cannot be avoided, methods must be found to handle, store and dispose of it in the least environmentally damaging way available.

To meet this commitment SWAHS will:

- Nominate a Waste Coordinator to coordinate and oversee the Waste Management Program across SWAHS.
- Nominate an officer at each unit of SWAHS to be responsible for the day-to-day management of waste activities, waste data collation and record keeping.
- Nominate a committee that is responsible for waste minimisation strategies, monitoring and improving waste performance.
- Promote and display a Waste Commitment that clearly states SWAHS commitment to waste minimisation.
- Implement a Waste Policy manual that includes, but is not limited to:
  - ♦ Definition of waste streams
  - ♦ Waste responsibilities
  - ♦ Legislative guidelines
  - ♦ Purchasing Policies
  - ♦ Waste tracking and monitoring systems
  - ♦ Correct segregation and disposal procedures
  - ♦ Transporting and storage requirements
  - ♦ OH &S waste related issues
  - ♦ Educational and promotional programs

## **2. Scope**

This Waste Management Policy manual has been based on a wide range of waste guidelines and has incorporated waste legislative requirements. This Waste Policy applies to all areas that are governed by SWAHS and requires the cooperation and commitment of all employees.

The policy manual is available on the SWAHS intranet site and will be reviewed on an annual basis or as required by the SWAHS Waste Management Coordinator.

## **3. Rationale**

In general, waste pollutes the environment and is potentially harmful to the health of humans and many other life forms. Waste takes up space that might have healthier and more productive uses. The minimisation and appropriate management of all types of waste within a health care unit is essential for environmental, resource preservation, legal obligations and financial reasons.

#### **4. Expected Outcomes**

SWAHS employees are committed to the Waste Management Program. Key Performance Indicators (KPIs) have been established to monitor and evaluate waste performance. SWAHS has implemented various waste systems that aim to meet the expected outcomes below:

- Compliance with legislative and licensing requirements by ensuring that employees of SWAHS are aware of these guidelines and apply these as part of their normal work routine.
- Standardisation of Waste Management Programs across SWAHS facilities to ensure best practice systems is in place.
- Improved waste performance through the implementation of annual waste minimisation strategies that supports efficient recycling programs and cost efficiencies
- Be recognised as a waste leader by both internal and external organisations including the Australian Council on Healthcare Standards (ACHS), NSW Department of Health (DoH) and Occupational Health Safety and Risk Numerical Profile (OHS&R).
- Compliance with the NSW Health OHS&R Numerical Profile Indicative Evidence 2000.
- Purchasing policies that comply with the Waste Reduction and Purchasing Policy (WRAPP).
- All employees are educated on waste management and can demonstrate that knowledge through correct segregation and disposal methods
- An effective promotional program that continually improves waste awareness and enhances employee involvement.

#### **5. Waste References**

- Environmental Protection Authority Regulations 1995 (EPA)
- Protection of the Environment Operations Act 1997 (POEO Act)
- NSW OH&S Act 2000 & NSW OH&S Regulation 2001
- ANZCWMIG Australian NZ, Management of Clinical & Related Wastes (1998)
- Clinical Waste Management Industry Group (2002)
- Infection Control in Health Care Setting NH&MRC (1999)
- Infection Control Circular 2002/45
- Infection Control Guidelines for Dental Healthcare Settings (2003)
- Guidelines for Handling Cytotoxic drugs & Related Waste in Healthcare establishments (1995)
- NSW Health, Waste Management Guidelines for Health Care Facilities (1998)
- NSW Government Waste Reduction and Purchasing Plan (WRAPP) 1995
- "Guidelines for the Safe Use of Glutaraldehyde in NSW Public Health Care Facilities" (circ. 97/61) NSW Department of Health, June 1997.



- NSW Radiation Control Regulation, 1998
- NSW Radiation Control Act, 1993
- "Guidelines for the Safe Use of Radiation in the Health Industry" NSW Department of Health, 1989.
- "Code of Practice for the Asbestos Management Programme" NSW Department of Health (91/114), August 1991.

### **5.1 Waste Web-sites for further reference**

**Planet Ark:** <http://www.planetark.com/index.cfm>

**Department of Environment and Conservation (NSW)**

<http://www.environment.nsw.gov.au/index.htm>

**Environment Protection Authority**

[http://www.environment.nsw.gov.au/soe/soe2003/chapter1/chp\\_ref.htm](http://www.environment.nsw.gov.au/soe/soe2003/chapter1/chp_ref.htm)

**NSW Health - Health Care Facility Wastes**

[http://www.wasteservice.nsw.gov.au/dir138/aptrixpublishing.nsf/Content/Info\\_Sheet\\_Health\\_Care\\_Facility\\_Wastes](http://www.wasteservice.nsw.gov.au/dir138/aptrixpublishing.nsf/Content/Info_Sheet_Health_Care_Facility_Wastes)

**Waste Management in Health Care Facilities**

<http://www.health.nsw.gov.au/public-health/ehb/general/waste/wastehcf.html>

## **6. Waste Policy Manual**

### **6.1 Background**

In 1995, there were growing concerns in Australia regarding diminishing landfill sites. The NSW government announced new legislative guidelines that were aimed at reducing waste going to landfill. A target of 60% was set and all government agencies were required to implement strategies to meet this target by year 2000.

Sydney West Area Health Service (SWAHS) developed and implemented a Waste Management Plan that achieved the 60% target in 1998.

The focus of the waste program was to standardise and implement best practice systems across SWAHS facilities in order to seek continuous improvement. The ongoing commitment by SWAHS employees has been a contributing factor that has led to the success of the program

SWAHS currently generates various types of waste as part of the organisational daily operations.

The Waste Management Program and Legislative requirements underpin SWAHS Waste Management Policy and Procedural Manual. The manual has been designed to familiarise and guide SWAHS employees to understand their responsibilities in waste management in order to comply with legislative requirements.

## 6.2 SWAHS Waste Commitment

SWAHS has a formal documented "Waste Commitment" aimed at promoting and supporting the Waste Management Program. Waste Policies and Procedures have been developed to demonstrate this commitment so that the employees have a clear understanding of their responsibilities in waste management. The Waste Statement is displayed in front entrances of SWAHS facilities to ensure that the wider community is aware of the organisation's commitment to waste minimisation. *(Refer to poster Appendix 2)*

The statement reads:

**Sydney West Area Health Service** employees are committed to promoting and supporting a Waste Management Program that is **safe, efficient cost effective and protects the environment.**

The rationale for this commitment is indicated as follows:

### ▪ Safety

SWAHS is committed to ensuring the health, safety and welfare of all its employees and the health and safety of others in the workplace. This will be achieved by adopting an Occupational Health and Safety Risk Management approach to the management of waste.

Safe work practices/Safety rules associated with waste handling, collection and disposal have been integrated into departmental job instruction and training for relevant employees.

### ▪ Environment

Waste pollutes the environment and is potentially harmful to the health of humans and many other life forms. Waste takes up space that might have healthier and more productive uses.

### ▪ Efficiencies

Waste minimisation programs have been implemented within the health care environment for all types of waste streams. These are aimed at reducing waste and the high costs associated with its disposal.

## 7. Relevant Waste Guidelines

There are a number of legislative requirements and guidelines relating to Waste that must be complied with. The guidelines are similar in content, however, four significant guidelines are regularly referred to and monitored throughout SWAHS, and these are:

- Environmental Protection Authorities (EPA) Waste Premises Operation and Protection of the Environment Operations Act (POEO) 1977
- NSW Government Waste Reduction and Purchasing Policy (WRAPP) 1998
- NSW Health, Management of Clinical and Related Waste 1998
- NSW OH&S Act 2000 & NSW OH&S Regulation 2001

Below are overviews of these guidelines:

## **7.1 Environmental Protection Authorities (EPA)**

Health facilities generating and storing clinical and related waste in excess of 2.5 tonnes must be in possession of a premise EPA license under the POEO Act. Compliance requires the following:

- Monthly collation and quarterly reporting of clinical waste volumes generated by individual facilities. These volumes need to correspond with the contractor's volumes.
- Pollution incidents within SWAHS facilities are to be reported immediately to the EPA.
- License renewals require authorisation by the CEO and/or nominated delegate to ensure accountability.
- Facilities must demonstrate compliance at all times as the EPA conducts annual license reviews of random facilities.

NB. Failure to comply with any of the above requirements will result in substantial fines for the organisation and possible loss of license.

## **7.2 Waste Reduction and Purchasing Policy (WRAPP)**

In 1995, the NSW government made an announcement that all NSW government agencies needed to develop and implement an environmentally responsible Waste Reduction and Purchasing Plan

The WRAPP policy currently focuses on the following waste streams:

- Paper products
- Office equipment and components
- Vegetation materials
- Construction and demolition and excavated material

Strategies developed for waste management must comply with the policy and incorporated in a WRAAP Plan. Government agencies must ensure that the plan is implemented and that progress reports are forwarded to the Department of Environment and Conservation (NSW) as requested. Progress reports are utilised to form the basis of the NSW Environmental Report. The Minister of Environment monitors the progress of these plans.

The WRAPP encompasses the following principles:

### **7.2.1 Waste Avoidance**

Waste avoidance means to reduce the quantity of waste being created. This is achieved through:

- reducing the amount of waste brought into the organisation e.g. contracts set out minimum packaging standards
- returning packaging/containers to the suppliers where possible
- reducing size of photocopying by using smaller fonts, margins and spacing when creating documents
- utilising electronic messaging services instead of hard copy documents
- adopting waste reduction principles as part of the planning stage of construction or redevelopment projects

- minimising the amount of waste by trimming grassed and landscaped areas
- purchasing printers that have the capabilities double-sided printing
- adjusting printer settings to DRAFT PRINT lessening the toner consumption by 30%
- consider waste generation and environmental impact when introducing new products into the organisation.

### **7.2.2 Waste Re-use**

Waste re-use means reusing a product for the same or similar application. Examples of these may include:

- single-sided documents can be re-used as note pads or scrap paper;
- boxes can be re-used for storage purposes, e.g. copy paper boxes can be transformed into gift boxes;
- “Kimgard” is a wrapping material that is used for wrapping sterile equipment; this is a reusable product and can be re-used as covers for equipment, patient chairs, etc. to replace linen (*General Services can advise and recommend how these can benefit your area*);
- re-useable crockery and cutlery should be used in staff cafeterias and for special functions where possible, disposable items should only be used for specific purposes, e.g. infectious areas or as requested by Infection Control.
- re-usable items should be the preferred product to be purchased where possible. Decisions to use disposable items should take into consideration the cost and environmental impact associated with disposal.

### **7.2.3 Waste Recycling**

Waste that is unsuitable for reuse and is classified as “recyclable” should be disposed of as such. Strategies should be adopted in areas of work, e.g:

- placement of paper-recycling bins/boxes in office areas, recycling centres in cafeterias and coffee shop areas to segregate recyclable waste from the general waste stream;
- crushing of waste concrete for road shouldering, sub bases and base pavement construction, footpaths, granular pavements, kerb and gutter pads;
- all other recyclable items have been listed in the recycling section of this manual (section 15);
- purchasing products that have recycled content where possible. A majority of SWAHS facilities have recently introduced the default purchase of 50/50 recycled content copy paper, this will assist with the preservation of our natural resources.

### **7.2.4 Purchasing practices**

Waste avoidance principles shall be strictly adhered to where possible to comply with WRAPP. Officers of SWAHS introducing new products or supplies

on behalf of the organisation need to liaise with the Waste Coordinator to seek advice on waste matters.

SWAHS regularly liaises and negotiates with manufacturers and distributors as part of the tender process to ensure that packaging of products are kept to a minimum. Return policies are being implemented to return pallets, containers, batteries, and any relevant product to the supplier.

Clauses relating to waste minimisation have been included as part of SWAHS tender specifications as indicated below:

The Health Service is most conscious of its effect on the creation of waste through its need to dispose residual items. Therefore, the tenderer shall provide the following information:

- The composition of waste and the impact of disposal costs for both environmental and financial.
- As a minimum, company policy on “waste minimisation” shall be attached.
- The ability of tenderers to assist in waste minimisation through better product design and specifically through the use of packaging made of:
  - Recyclable material
  - Returnable material
  - Recycled material

Consequently, tenderers are requested to submit details in the tender of the following:

- The tender’s position, achievements, policies and procedures in conforming to this requirement specifically the minimisation of waste residuals following use of product and the awareness of its importance.
- The volume and composition of their packaging and shipping materials and in particular the type and proportion of such materials that can be recycled.

### **7.3 NSW Health, Management of Clinical and Related Waste 1998**

The NSW Department of Health guidelines apply to all NSW Public Health facilities including community health centres. The guidelines are designed to assist managers and personnel of health facilities to implement standards that comply with the relevant legislations.

These guidelines have been included in this waste policy manual.

### **7.4 NSW OH&S Act 2000 & NSW OH&S Regulation 2001**

The Waste Policies & Procedures Manual have been developed in accordance with OH&S legislative requirements and reflect the responsibilities in regards to waste management.

Employers must ensure the health, safety and welfare of all people in the workplace by demonstrating a ‘Duty of Care’ by ensuring that:

- Access and egress to the premises are safe and without risk to health.
- Plant or substances provided are safe and without risk to health.
- Policies and procedures are implemented to ensure workplace health and safety standards are provided and maintained.
- The development of safe systems at work in consultation with staff.

- The provision of OH&S information, instruction, training and supervision for all employees to enable them to carry out their work safely.
- Employees are consulted with agreed mechanisms, to enable employees to contribute to the making of decisions affecting health, welfare and safety at work.
- In consultation with employees SWAHS will promote the identification, assessment and control (including monitoring the effectiveness of control measures) of any foreseeable workplace hazards that have the potential to harm SWAHS employees or others in the workplace.

Employees must cooperate with the employer and not put themselves or others at risk by:

- Following the employer's reasonable instructions concerning health and safety in the workplace,
- Participating in OH&S education and training,
- Reporting any workplace hazards,
- Assisting in the OH&S Risk Management process, by being actively involved in the identification, assessment and control of hazards and associated risks in the workplace,
- Assisting managers in establishing and monitoring OHS Consultation in the workplace.

Manufacturers, suppliers, designers and installers of plant or substances must comply with the legislative requirements by:

- Undertaking risk assessment to eliminate or minimise any risk arising from hazards associated with plant or substances,
- Ensuring the safe use, storage, dismantling, handling, disposal and transport of plant or substances,
- Carrying out necessary research, testing, maintenance and providing records,
- Providing adequate information about the plant or substance that may affect health and safety.

## **8. Waste Management**

Waste strategies are developed on an annual basis and the General Services Business Review Group (BRG) monitors and reports progress on a quarterly basis.

### **8.1 Waste Responsibilities**

Everyone within SWAHS has a role in Waste Management. Indicated below are specific employee responsibilities:

- The *Area Chief Executive Officer or delegate* approves any major initiative that requires financial outlay and authorises EPA Licencing renewals and Waste Reduction and Purchasing Reports.
- *Corporate Services General Services Business Review Group* in conjunction with the *Waste Coordinator* oversees the Waste Management Program and monitors waste accidents/incidents and statistical data.

- *Area Supply Services* ensures that purchases made by the organisation complies with the Waste Reduction Purchasing Plan (WRAPP) and negotiates with suppliers to minimise packaging and reduce waste entering the organisation where possible.
- *Each unit/service manager* is responsible for his or her area of work and for ensuring that their employees adhere to all waste management practices.
- Each unit of SWAHS has a nominated *waste officer* who is responsible for the day-to-day management of waste activities, waste data collation and record keeping.
- All *SWAHS employees* are responsible for the correct segregation and disposal of waste. Employees are required to carry out their duties in accordance with the documented safe work practices/safety rules and report waste accidents/incidents.

## 8.2 Waste Contacts

The SWAHS Waste Management Coordinator and waste officers in each facility are available to provide advice and assistance with any waste matters.

Below are the contact numbers for these officers:

Facilities	Contact Numbers	Position
Auburn	9563 9667	General Services Site Coordinator
Blacktown	9881 8280	General Services Site Coordinator
Blue Mountains	4784 6611	Domestic Services Supervisor
Cumberland	9840 3023	General Services Site Coordinator
Lithgow	6350 2332	Quality Support Officer
Lottie Stewart	9858 3255	General Services Site Coordinator
Mt. Druitt	9881 1748	General Services Site Coordinator
Nepean	4734 2357	General Services Site Coordinator
Parramatta Linen Services	8838 1308	Team leader
St. Joseph's	9749 0323	General Services Site Coordinator
Springwood	4751 0337	Domestic Services
Westmead	9845 6000	General Services Site Coordinator
Blacktown Campus – Admin Building	9881 7657	SWAHS Waste Management Coordinator

## 8.3 Waste Storage Areas

Waste storage areas must comply with the following EPA requirements. These include:

- appropriate ventilation



- adequate fitted locks to secure the area whilst unattended
- Rigid impervious flooring for hosing and cleaning purposes
- appropriate drainage and bunting
- suitably located to restrict public access
- suitably located to prevent contact with food and clean supplies
- availability of appropriate spill kits and cleaning equipment to clean spillages and appropriate personal protective equipment (PPE)
- hand basin facilities for hygiene purposes

#### **8.4 Waste Collection Procedure and Schedule**

Trained Environmental Services employees collect waste. These employees wear appropriate personnel protective equipment (PPE) whilst performing their duties. Environmental employees collect waste from all areas of the hospital on a routine basis determined by the Waste officer at each facility to minimise:

- OH&S risks to staff, visitors and patients
- infection and cross contamination
- odours arising from waste disposal
- manual handling risks through overfilling of containers

#### **8.5 Cleaning of waste equipment**

- bins should be washed using neutral detergent and bin liners may be used to reduce cleaning
- waste trolleys and electric buggies used to transport waste should be cleaned daily
- Waste holding areas should be part of the pest control schedule to discourage the harbourage of vermin.

### **9. Waste Streams Definition**

This section gives in-depth information relating to the various waste streams that exists within the facilities.

#### **9.1 General Waste**

Any waste, which is inert or solid and is not capable of being composted, recycled, reprocessed or reused. These includes:

- flowers
- plastic products not capable of being recycled
- disposable items

The general waste stream also includes disposal of incontinence pads, sanitary napkins, tampons, nappies and any other sanitary waste resulting from the control of body fluids.

Health, safety and environmental issues must be addressed when presenting the above waste for disposal at Waste Services NSW Centres. These types of waste are treated as “special waste” at designated landfills. These are handled separately to avoid their direct contact with workers and machinery to minimise any nuisance.

Monitoring of general waste occurs at the Waste Management Centres to detect the presence of unacceptable components. These waste centres and transfer

stations are not licensed to receive clinical, cytotoxic, pharmaceutical, radioactive or sharps waste.

If any clinical or hazardous wastes are disposed of as general waste, the whole load will be segregated and transported to an appropriate licensed treatment facility. Breaches by the customer or transporters will incur substantial fines.

#### **9.1.1 Segregation practices**

General waste should be placed in semi-opaque white bags or designated colour coded mobile bins that are provided in the work area.

Waste bags should be transported to the nearest mobile bin. Bags should be transported avoiding any body contact with the bag. Hands should never be placed in waste bags under any circumstances. Mobile bins should be transported one at a time to avoid manual handling injuries. Bins should be transported in a safe manner at all times and should be transported via non-public routes where possible.

#### **9.1.2 Storage and collection**

General waste is stored in bins/compacted at the waste holding area. An area appointed waste contractor collects the bins/containers on a scheduled basis or as required. General waste is collected from Health facilities and is categorised as “**Special Waste**” and is specifically treated at designated landfills.

#### **9.1.3 Cost of disposal**

The cost of disposing general waste is in accordance with the current contract price and is generally 4 times lesser than Clinical waste

### **9.2 Clinical Waste**

Clinical waste is waste that has the potential to cause infection or offence. When segregated and disposed correctly in appropriate Yellow receptacle, there is virtually no public health risk.

Types of clinical waste: *(Refer to Circular 99/13; 98/87; 2002/45)*

- Sharps
- Human tissue *(excluding hair, teeth & nails)*
- Bulk body fluids and blood
- Visible 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 that has not been treated to standards approved by the Director General of NSW Health

#### **9.2.1 Segregation practices**

Clinical waste should be segregated and disposed of in yellow lockable mobile bins/ containers and appropriately placed in clinical areas. Immediate segregation and disposal of clinical waste should occur at the point of generation. Correct identification of clinical waste is essential as it costs four

times the amount of general waste to dispose. However, if the waste classification is unclear it is advisable for the employee to dispose the waste as clinical waste.

Double handling of waste should be avoided at all times and bins should never be overfilled. Plastic liners placed by the waste contractor should never be adjusted, as these have no significance except for the waste contractor.

Where bags are utilised to contain clinical waste, these must be the approved yellow bags with the appropriate international recognised bio hazard symbol in black, as illustrated in NSW Department of Health "Waste Management Guidelines for Health Care Facilities" August 1998. These should be:

- Securely fitted to receptacles or pedal operated bag holders. These are fitted, so that sufficient space is left to tie the bag without compacting or disturbing the contents. Handling of bags whilst transferring to the yellow mobile bin should be done avoiding body contact.
- Drainage bags with tap attachments should be drained of body fluids by emptying in the sluice in the utility rooms (*drainage bags that don't have tap attachment should not be cut into or manipulated but must be emptied full*). Extreme care should be taken when undertaking this procedure and appropriate PPE such as gloves, goggles and aprons must be worn to minimise hazards associated with splashes.

### **9.2.2 Waste handling and transportation**

Mobile bins containing clinical waste must never be overfilled and handled with care due to the infectious nature of the waste. Protective apparel should be worn when transporting these bins.

Mobile bins should be locked where possible and transported one at a time to the holding area. The waste transporters should use non-public routes to transfer the waste and should check for any spillages that may occur.

### **9.2.3 Clinical waste spill kit**

Facilities should manage waste spills as they occur. Personnel involved in spill management should be trained in emergency spill procedures, disposal and handling requirements. Spill kits should be readily available in areas where clinical waste is generated or stored.

Clinical waste spill kit should contain at least:

- Broom, a pan and scraper, yellow mop and bucket
- 10 litre reusable plastic container or bucket fitted with lid containing: 2 clinical waste bags for the disposal of clinical wastes.
- Neutral detergent
- Rubber gloves suitable for cleaning
- Detergent, sponges/disposal cloths
- Sleeve impervious gown, face mask, heavy duty gloves, waste incident report form
- Waste spill sign

#### **9.2.4 Clinical spillage procedure**

Clinical waste should never be picked up by hand. Tray and a banister brush should be used for this purpose and safely disposed of in the yellow mobile bins.

Any clinical spillage that involves body fluids or blood must be barricaded using appropriate “signage” to restrict access. Staff are to clean spillages immediately by wiping the bulk with paper towels using appropriate PPE and then washing with a neutral detergent. Signage should be removed when the floor surface is dry. Carpeted areas should be shampooed.

### **9.3 Sharps Waste (Clinical)**

Any waste resulting from medical, nursing, dental, veterinary, pharmaceutical, skin penetration or other related clinical activity, and that contains instruments or devices that: have sharp points or edges capable of cutting, piercing or penetrating the skin (e.g. needles, - are designed for such a purpose or have the potential to cause injury or infection.

#### **9.3.1 Sharps disposal and responsibility**

The OH&S legislation requires employers and employees to maintain a safe working environment. Accordingly, it is hospital policy that the person who uses any sharp object capable of inflicting a penetrating injury is responsible for its safe disposal.

New legislations require health facilities to accept needles and syringes from the community for disposal free of charge.

External organisations requesting disposal of large volumes of needles and syringes may be charged and should be informed of the appropriate waste contractor for future collection.

#### **9.3.2 Segregation practices**

Sharps should be disposed of in approved yellow sharp container that meets AZ/NZS 4261 or AS 4031 depending on if reusable or disposal system and should only be filled to the marked line. The container should be sealed in accordance with manufacturers guidelines. Full disposable sharp containers are to be sealed and placed in the appropriate designated storage area and transported to a lockable area awaiting collection

### **9.4 Cytotoxic & Related Wastes**

Related waste is waste that has the same risks as clinical waste and present health risks to the environment and the wider community. Related waste includes:

- ◆ Cytotoxic waste
- ◆ Pharmaceutical waste
- ◆ Recognisable Body Parts

#### **9.4.1 Cytotoxic waste**

Cytotoxic waste means material contaminated with residues or preparations containing materials that is 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.

#### **9.4.2 Cytotoxic Segregation practices**

Disposable materials/equipment including protective wear should be worn during any medical procedure.

Cytotoxic waste including materials and personal protective equipment should be carefully disposed of in approved purple bags with the waste symbol (denoting a cell in telophase), sealed and taped at the neck of bag. These should be placed in the purple sulo bin and stored for collection away from public view. Environmental Services staff removes the bin as required.

#### **9.5 Sharps (cytotoxic)**

Any object capable of inflicting a penetrating injury, which may or may not be contaminated with blood and or body substances. These include needles attached to cytotoxic syringes, scalp vein sets, intrathecal and intra-cavity stilets, cytotoxic contaminated bottles and ampoules. Other sharp objects or instruments designed to perform penetrating procedures.

##### **9.5.1 Sharps disposal and responsibility (cytotoxic)**

The OH&S legislation requires employers and employees to maintain a safe working environment. Accordingly, it is hospital policy that a person who uses any sharp object capable of inflicting a penetrating injury is responsible for its safe disposal.

Sharps used for cytotoxic drug administration should be disposed of in the approved "purple sharps container" and should only be filled to the marked line. The container lid should be placed carefully over the opening of the container to seal the contents. Disposable sharp containers should be placed in the purple mobile bin and the reusable sharp containers should be stored in an area away from public view.

##### **9.5.2 Cytotoxic spill kit**

Facilities should manage waste spills as they occur. Personnel involved in spill management should be trained in emergency spill procedures and handling requirements. Spill kits should be readily available in areas where cytotoxic drugs cytotoxic is generated or stored.

Cytotoxic spill kit should contain at least:

- mop and mop bucket, a pan and scraper
- a large (10 litre) reusable plastic container or bucket with fitted lid, containing:
  - 2 cytotoxic waste bags for the disposal of cytotoxic waste
  - 2 hooded overalls, shoe covers, long heavy duty gloves, latex gloves, a face mask and eye protection
  - absorbent towelling/absorbent spill mat
  - incident report form
  - waste spill sign

### 9.5.3 Cytotoxic Waste spill containment procedures

#### Powder Residue on Carpets

- Vacuum the powder residue with a spillages disposable battery operated vacuum cleaner
- Dispose of vacuum cleaner
- Shampoo carpeted area and let dry

#### Liquid spillages

- Clean up spill with disposable cloths
- Shampoo area and allow to dry

NB: If any of the cytotoxic substance comes in contact with skin, flush the contact area immediately with copious amounts of water for 15 to 20 minutes. Someone other than the affected employee should clean up the spillage.

### 9.6 Pharmaceutical Waste

Consists of pharmaceuticals or other chemical substances specified as regulated goods in the Poisons and Therapeutic Goods Act 1966. This includes any substance that is specified in a Schedule of the Poisons List under that Act, as well as any therapeutic good, which is unscheduled.

Pharmaceutical waste includes:

- ♦ Expired and discarded drugs
- ♦ Pharmaceutical waste generated in manufacture,
- ♦ Filters, laminar flow cabinets and packaging contaminated by pharmaceutical products.

#### 9.6.1 Segregation practices

Pharmaceutical waste should be placed in the Purple Mobile bin, which is used for cytotoxic waste. These bins should be kept locked and kept in a secure area whilst awaiting collection by the contractor. The disposal process is by incineration.

### 9.7 Recognisable Body Parts

These are parts of the human body that can still be recognised including products of conception (*excluding teeth, hair and nails*).

#### 9.7.1 Segregation practices

This waste must be disposed of in a yellow bag, which is placed in the Burgundy Mobile Bin and transported to a secure waste storage area. The disposal process is by incineration.

#### 9.7.2 Storage and transportation

Cytotoxic, pharmaceutical and body parts are stored in the clinical waste storage area. This is kept secure till such time as collection occurs by the SWAHS waste contractor. The cytotoxic, body parts and pharmaceutical waste are incinerated at 1400 degrees and clinical waste is decontaminated and buried as special waste.

### 9.7.3 Cost of disposal

Clinical and related waste disposal are approximately 95 cents per kilo or higher depending on distance of facility

## 9.8 Hazardous & Non-Hazardous Waste

### Waste Classification

Waste must be classified to determine if licence is required for transportation.

Classifications can be obtained from:

[www.environment.nsw.gov.au/waste/guidelines.htm](http://www.environment.nsw.gov.au/waste/guidelines.htm)

Dangerous goods must be identified to transporters.

### 9.8.1 Hazardous substances

Chemical wastes must be classified to determine if licence is required for transportation these must comply with the Hazardous Substances Regulation, Dangerous Goods Act and Regulation, Poisons and Therapeutic Goods Act. Some hazardous liquid waste includes: mercury, lead, cyanide, azide, formalin, glutaraldehyde and polychlorinated biphenyl (PCB), are subject to special disposal requirements. Reference should be made to the substances Material Safety Data Sheet (MSDS) for correct disposal requirements provided by the manufacturer/supplier.

Classifications can be obtained from:

[www.environment.nsw.gov.au/waste/guidelines.htm](http://www.environment.nsw.gov.au/waste/guidelines.htm)

### 9.8.2 Hazardous & Non-Hazardous Substance Requirements

Chemical waste used in a health facility should include a MSDS. Chemicals purchased in large quantities should be registered with the hospital engineer. Departments purchasing hazardous substances as part of their normal operation must maintain a hazardous substance registrar and MSDS. *(Reference SWAHS OH&S Intranet Site: SWAHS Hazardous Substance Fact Sheet No 20)*

Hazardous waste requiring disposal should be labelled and require a copy of the Material safety data Sheet (MSDS). Notification should be given to the Environmental Services department to dispose of any unwanted hazardous waste.

### Material Safety Data Sheets

Material Safety Data Sheets (MSDS) are information sheets produced by manufactures and/or suppliers. These are required for all dangerous/hazardous substances. *(Reference SWAHS OH&S Intranet Site: SWAHS Material Safety Data Sheet and Labels Fact Sheet No 26.)*

These should include:

- Name of substance
- Recommended use for substance
- Physical and chemical properties of substance
- Health hazards and first aid/emergency information
- Safety precautions taken whilst using substance
- Recommended disposal methods

- Classification rating

### **9.8.3 Storage of Hazardous and dangerous goods**

Hazardous substances and dangerous goods should be stored as per manufacturer instruction and in accordance with legislative requirements. An appointed SWAHS contractor collects and disposes chemical and hazardous waste in accordance with legislative and the EPA requirements.

Facilities have to have an appropriate “Dangerous Goods Licence” approved by WorkCover NSW to enable storage of Dangerous Goods. Officers storing dangerous goods must notify the facility engineer of the types, location and quantities/containers of the dangerous goods stored.

Waste storage area and loading/ unloading areas must be designed to prevent water pollution in the event of spills or leaks. Spill management procedures are available from: [www.environment.nsw.gov.au/mao/bundingspill.htm](http://www.environment.nsw.gov.au/mao/bundingspill.htm)

Regular inspections should be undertaken and documented waste storage areas and appropriate emergency procedures and spill equipment be maintained at all times.

### **9.8.4 Hazardous Spill Procedure**

Emergency procedures will be based on the product classification and in accordance with the manufacturer’s instruction provided in the MSDS. In all cases the emphasis must be on safety of humans and confining the hazard. Emergency response decisions must also take into account potential environmental damage e.g. avoiding liquid spills entering the drainage system. The waste coordinator must be notified if a spillage occurs. Relevant staff handling waste should be trained in emergency spill response.

### **9.8.5 Transportation and treatment/disposal**

Special Safety and Legislative requirements apply to the transportation of hazardous waste and substances. Waste Generators are responsible for testing and evaluating their wastes to ensure that if wastes are for example, flammable, toxic or corrosive.

A licensed transporter must be used to transport waste that is classified as hazardous Group A, Group B and Group C when amounts exceed 200 kg/200 litres. Ensure the transporter takes the waste to a facility that can lawfully accept it. A register of licensed premises is available from:

[www.environment.nsw.gov.au/prpoea/index.htm](http://www.environment.nsw.gov.au/prpoea/index.htm)

### **9.8.6 Tracking of Hazardous Waste & Liquid Substances**

Hazardous Waste Group A that is classified as such, must be tracked. The transporter must obtain a consignment authorisation number from the treatment/ disposal facility (contractor to provide).

A waste data form must be completed by the nominated waste officer of each facility and kept for auditing purposes. Waste Generators, transporters and waste facilities must notify the waste coordinator of any waste tracking system irregularity. Waste data forms can be obtained from:



### **9.8.7 Cost of Disposal**

The cost of disposal varies depending on the classification of the chemical or hazardous waste and volume-requiring disposal.

## **9.9 Dangerous Goods**

Dangerous Goods are identified by coloured diamond shape symbols on the label and/or packaging of the product/substances. The 'diamond' identifies the 'class' and type of dangerous goods. (*Reference Appendix 4: Classification of Dangerous Goods*)

A dangerous good is a product or substance that is either:

- explosives
- gases (compressed, liquefied or dissolved under pressure),
- flammable solids (excluding organic waste, and all physical forms of carbon such as activated carbon and graphite),
- substances which in contact with water emit flammable gases,
- oxidising agents and organic peroxides,
- poisonous (toxic) substances,
- corrosive substances.

### **9.9.1 Labelling & Recording**

When disposing of dangerous goods in a container that is not the original container, the container must be adequately labelled indicating the class of dangerous good. Refer to manufacturers MSDS for correct disposal requirements.

Officers storing dangerous goods must keep records.

### **9.9.2 Transportation and treatment/disposal**

Special Safety and Legislative requirements apply to the transportation of dangerous goods. Waste Generators are responsible for testing and evaluating their wastes to ensure that if wastes are for example, flammable, toxic or corrosive.

Licensed transporters must be used to transport waste that is classified as hazardous Group A, Group B and Group C when amounts exceed 200 kg/200 litres. Ensure the transporters take the waste to a facility that can lawfully accept it. A register of licensed premises is available from [www.environment.nsw.gov.au/prpoea/index.htm](http://www.environment.nsw.gov.au/prpoea/index.htm)

## **9.10 Liquid Wastes**

Liquid Waste is defined as waste material that is determined to contain "free liquids" and separated from the solid portion of waste under ambient temperature and pressure.

Liquid wastes includes grease trap waste, used lubricating oil and waste normally discharged to the sewer.

### **9.10.1 Grease trap procedures**

Grease traps procedures should be in place to ensure grease traps are maintained in accordance with Sydney Water's standards, these include:

- Grease traps should be adequate for the collection of all grease wastes, are operating and maintained at maximum efficiency to reduce vermin infestation;
- Vegetable cut-offs, scraps and/or similar waste should be prevented from entering the waste water stream by installing fine screens to sumps, plus other work practices;
- Valid Sydney Water Trade Waste Permit are in place;
- Grease trap waste is kept to a minimum through a monitoring process;
- Facilities comply with the Sydney Water's Standards of Acceptance (1994 Standards of Acceptance for grease: 50 mg/litre);
- Units should install and maintain pre-treatment equipment in kitchens and other appropriate locations in order to minimise grease trap waste generation;
- Oils and fats be kept out of the liquid waste stream. This is undertaken by collecting and disposing through the general waste stream or through a filtering recycling system;
- Minimum use of emulsification agents such as detergents or strong alkalis is used.

A Biotech Grease Eradication System was installed at Mt. Druitt hospital kitchen. This system uses an environmentally friendly process of bio remediation to convert grease and oil to water and CO<sub>2</sub> gas. This eliminates polluting the environment, keeps waterways clean and preserves landfill sites.

### **9.10.2 Grease trap disposal and recording procedures**

- All units in SWAHS are to use the services of an area appointed general waste contractor for the disposal of liquid waste.
- All units are to ensure that their grease traps are adequate for the collection of all grease wastes, operating, maintained at maximum efficiency and prevents the harbourage for vermin.
- Units are to retain all relevant dockets and records concerning collection services from the appointed waste contractor.
- Units are to provide appropriate supervision of the contractor to ensure correct procedures for the removal of grease trap waste are complied with.
- The process of "de-watering" is not permitted and units requiring guidance should consult with the Sydney Water's, Trade Waste Section.

### **9.11 Batteries**

Discharged batteries that contain elements of acids, cadmium and nickel are toxic and should not be disposed of in the normal general waste stream.

Large discharged batteries should be disposed of through an external contractor, which can be organised through the Waste Coordinator.

Tender specifications for batteries should include suppliers/manufacturers return policies, so that the supplier/manufacturer can collect discharged batteries. This will eliminate issues associated with the storage of toxic materials and reduce disposal costs.

## **9.12 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 immuno assay and bacteriological procedures and may be in a solid liquid or gaseous form and be included in the body waste of patients under treatment.

### **9.12.1 Segregation practices**

Material is handled after consultation with the hospital's Radiation Safety Officer. Scintillation waste is removed as hazardous waste after transfer to radioactive waste store. Transfer arrangements should be made through the hospital's Radiation Safety Officer.

### **9.12.2 Radioactive Spill procedure**

- Evacuate all personnel from the immediate area
- Contact the radiographer-in-charge
- Restrict access to the area, if possible contain the spill
- Await instructions from radiographer -in-charge
- Record incident using SWAHS staff accident/incident/illness report form (WS-290).

## **9.13 Bio Hazard Waste**

This waste is genetically manipulated material and may be in solid or liquid form 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.

### **9.13.1 Segregation practices**

Guidelines for handling genetically manipulated material are developed by the Genetic Manipulation Advisory Committee (GMAC) and are enforced by the responsible Institutional Bio-Safety Committee. Genetically manipulated material is any material used in genetic manipulation for research or clinical applications.

### **9.13.2 Disposal methods**

Biohazard waste should be sterilised on site by steam autoclaved and temperatures must reach 121 degrees celsius for 20 minutes. Following sterilisation, waste should be disposed of as clinical waste.

## **9.14 Microbiological Waste**

Microbiological waste is created by microbial or tissue cultures and may be autoclaved by the user depending on the type of hazard before disposal into the contaminated waste stream.

### **9.14.1 Segregation and disposal practices**

Microbiological waste that is autoclaved must ensure temperatures reach 121 degrees celsius for 20 minutes. Following sterilisation, the waste must be disposed into the yellow mobile bin.

## **9.15 Trade Waste**

Trade Waste is a type of inert waste, which consists of virgin excavated natural materials such as clay, gravel, sand, soil and rock that are not mixed with any type of waste. Building and demolition wastes such as bricks, concrete, metal, timber. These wastes must be free from asbestos or any form of contamination.

### **9.15.1 Broken glass**

Uncontaminated broken glass or small items (e.g. < 500-ml beaker) should be placed in AS4031-1992.approved sharp containers. Large amounts of glass should be carefully wrapped, labelled and stored appropriately in designated waste holding areas and disposed of as trade waste.

### **9.15.2 Contaminated glass**

Contaminated broken glass should be safely placed in AS4031-1992.approved sharp containers

### **9.15.3 Fluorescent tubes**

Fluorescent tubes should be safely disposed into Trade waste bins.

## **9.16 Recyclable Products**

Recyclable waste is items that have the capability to be reused or reprocessed for reproduction.

### **9.16.1 Segregation and disposal**

Recyclable waste should be segregated and disposed of in appropriate coloured wheelie bins. These are collected and stored in the waste area until collection by the waste contractor. Recyclable waste is transported to recycling plants.

- **Packaging and Paper** – all types of coloured or non-coloured paper, index cards, magazines, newspaper, manilla folders and hardbound manuals, stapled documents are acceptable. These items should be disposed of in green bins with orange lid.
- **Cardboard** – all types of cartons / cardboard, e.g.: egg containers and cereal packaging. Cardboard boxes should be neatly stacked, (not to be placed directly in mobile bin) smaller packaging can be placed in cardboard boxes and stored in designated collection points within the work area. These are transferred to the waste area by the General Services Staff. These are

compacted or disassembled by the hospital staff for collection by the waste contractor.

- **Plastic Products** - plastic products that have recyclable symbol is a recyclable product, including PET bottles, milk containers. Acceptable clean recyclable products should be placed in the yellow lid/green body recycling bin (some facilities have a blue lid/green body bin at present). This is collected and stored for collection by the waste contractor.

- **Glass Waste** - all types of unbroken cleaned glass/bottles are recyclable and should be placed in the green/blue lid commingled recycling bin.

Acceptable clean recyclable products should be placed in the yellow lid/green body recycling bin (some facilities have a blue lid/green body bin at present). (Broken glass should be wrapped and marked as such and left in the dirty utility room to be disposed of as trade waste).

- **Aluminium** - aluminium cans are placed in the yellow lid/green body recycling bin (some facilities have a blue lid/green body bin at present).
- **Phones** - out dated or broken mobile phones and communication equipment can be recycled and should be returned to Westmead Telecommunications Department. Most phone companies currently has a recycling program in place.
- **Toner Cartridges** - toner printer cartridges are recyclable and should be placed in the specific (Cartridge Rescue) cardboard box designated for this purpose only. All toner cartridges can be recycled by placing the empty cartridge in its plastic bag/sleeve. Please recycle the cardboard paper wrapping in the appropriate bins. Once the box is full, a phone call should be placed with your General Services department who will collect the full box and replace it with a clean, empty one.

- 9.17 Confidential Waste

Under the new national privacy laws, an organisation must take reasonable steps to protect the personal information it holds from misuse and loss and must take reasonable steps to destroy or permanently de-identify personal information if it no longer needed.

Waste is classified as "confidential" if contents of the material or document contain sensitive information that may breach confidentiality, cause undue stress to an individual or embarrassment to the organisation. These documents should be disposed of as "confidential waste".

Confidential material/data should be disposed of in the red lid/green body locked wheelie bin or shredded & then placed into the ordinary paper recycling bin.

### 9.17.1 Collection and Disposal

The contractor that collects, transports and destroys confidential data must be able to demonstrate that they meet the T4 requirement as specified by Australian Security Intelligence Organisation (ASIO).

Confidential documents are shredded under secure measures and recycled. The waste contractor must provide a destruction certificate to the facility as proof of destruction.

**NB.** Health facilities requesting the destruction of large volumes of archived documents, electronic/magnetic media items, optical media items, hard drives, non-electronic and non-paper media item (such as videos, x-rays, microfiche, etc.) should make arrangements through the General Services department at their relevant site.

#### **9.17.2 Cost of Disposal**

As per contract price.

### **9.18 Organic Products**

This includes wood, garden, food, vegetable and natural fibrous material waste and bio-solids, which are capable of composting or could be used to enhance lawns /gardens.

#### **9.18.1 Segregation practices**

- Westmead and Blacktown Hospital utilise pulping equipment for their food waste. The food waste should be segregated and disposed of in the blue mobile bin. Food waste from patient trays contains a small amount of paper, which is acceptable for recycling.
- Food waste that is not pulped and is biodegradable is also placed in the blue mobile bin.
- Kitchen waste that is not suitable for pulping, non-biodegradable and is not recyclable should be disposed of in the general waste stream. Shrubs should be shredded and utilised for compost where possible.

#### **9.18.2 Handling and Disposal**

Each unit should have procedures in place that aim to minimise waste handling. Handling and disposal of recyclable vegetable waste should be as efficient as possible and disposed of in mobile bins. The bins should only be half filled and be removed from the area as required to avoid odours.

Wheelie bins must be cleaned with neutral detergent after collection before reuse in the kitchen area.

#### **9.18.3 Recycling Disposal Costs**

All recyclable waste is disposed without charge

## **10. Waste Tracking and Monitoring Systems**

### **10.1 Key Performance Indicators**

Key Performance Indicators (KPI's) have been developed and benchmarks have been established to measure waste performance, these tools include:

- recycling percentages to monitor performance
- occupied bed days "OBD" to measure (kg and cost per patient)

The data is monitored and analysed by the Environmental Services Business Review Group to ensure that continuous improvement is made in waste management.

## **10.2 Waste Volumes & Costs**

SWAHS facilities provide volumes and costs data to the Waste Coordinator on a quarterly basis. Statistical reports are provided to the Environmental Services BRG Group for monitoring and internal/external benchmarking.

## **10.3 Waste bar-coding system**

Clinical waste is tracked through a bar-coding system and placed on the yellow mobile bin by the environmental staff. Bar codes provide the following information:

- source of waste generation
- weight of waste per unit/dept.
- waste disposal cost per unit/dept

Weights are monitored and recorded for the purpose of analysing waste performance.

## **10.4 Waste Numerical Profile Audit**

Waste audits are conducted to monitor waste performance and compliance to legislative requirements. Waste audits are undertaken as indicated below:

- As part of the environmental audit inspections, supervisory staff performs visual checks of bin/receptacle contents. The supervisor monitors incorrect segregation and disposal practices and report deficiencies to the manager of the unit/service.
- Waste audits are undertaken at SWAHS facilities every 2 years to monitor compliance. A number of committee members of the Environmental Services Business Review Group (ES-BRG) who are trained waste assessors conduct these audits and prepare reports for the executive. Audit results are utilised to measure SWAHS performance with external organisations.

### **10.4.1 Waste Audit Tool**

Audit tools includes the following sections:

- Management
- Policy
- Occupational & Public Health and Safety
- Waste Minimisation
- Handling, Containment & Transportation
- Education

The sections are rated to ensure that SWAHS has implemented strategies to meet the audit requirements. The results are utilised to develop strategies, improve performance and maintain compliance.

## **10.5 Segregation Audits**

Random segregation audits are performed by cutting open waste bags and checking the contents for correct segregation.

Segregation audits determine the accuracy of waste segregation at the department level and provides feedback to Environmental Services BRG Committee and departments on performance.

Audits should be conducted by observing the following:

- well ventilated area
- trained personnel to perform the audit
- appropriate equipment to handle waste
- appropriate PPE (Personal Protective Equipment)
- disposal sheeting to separate waste streams
- reporting document

At the duration of the audit, waste must be safely disposed off in correct bins.

## **11. Waste Education Sessions and Promotional Activities**

SWAHS employees are provided with ongoing training and education in Waste Management Principles to ensure that correct segregation practices and correct disposal methods are known and adhered to.

### **11.1 New Employees**

New employees are required to attend a waste session during the orientation program to familiarise them with SWAHS Waste Management Program and employee responsibilities.

#### **11.1.1 Session modules includes:**

- SWAHS Wastes Management Program
- Legislative Requirements
- Waste streams definition
- OH&S risks
- Employees responsibilities
- Waste volumes and expenditure

### **11.2 Existing Employees**

Existing employees are kept informed and are provided with waste updates through organisation newsletters, broadcasts messages and through specially designed in-services in their respective work areas. Waste promotional programs are conducted annually across SWAHS and employees are encouraged to participate.

### **11.3 Waste Handlers**

Employees who regularly perform duties involving the collection, handling and transporting of waste are provided with a competency based training program to ensure that waste is handled in a competent and safe manner.

The waste handlers training program is designed to educate employees to carry out their duties in a safe manner.



The training module includes:

- Safe handling and transportation of waste
- Correct lifting and manual handling techniques
- Immunisation and vaccination programs
- Use of protective equipment
- Safe work practices
- Correct hygiene procedures
- Reporting requirements associated with waste incidents
- Safe operation of waste equipment and transport vehicles
- Waste segregation and tracking systems
- Spillage procedures
- Spill kits and cleaning equipment

## **12. Waste Contracts and Tenders**

The Clinical & General Waste contracts are awarded on a 3-year contract with a 2-year option. Specifications are reviewed prior to the expiration date of the waste contracts. These are updated to ensure that SWAHS requirements are met. Annual evaluations are conducted with the waste contractors to ensure that their services are carried out in accordance with the specifications specified in the tender. Officers of SWAHS are nominated as members of the tender committee and approve tenders. The Contractors must provide on going reports to meet the WRAPP (*Waste Reduction & Purchasing Policy*) reporting requirements.

### **12.1 Clinical Waste Contract**

NSW Health & State Procurement coordinates the tender process for the disposal of Clinical and related wastes contract. The clinical waste disposal contract includes the follow waste:

- Clinical and Related Wastes
- Sharps
- Cytotoxic
- Body parts

### **12.2 General Waste Contract**

SWAHS Supply Services coordinates the tender process for the disposal of general waste. The General Waste Contract includes the following waste for disposal and reproduction:

- General Waste
- Liquid Waste
- Recyclable waste
- Food Waste
- Trade Waste
- Security documents
- Hazardous waste

### **12.3 Quadrangle Tender Committee**

SWAHS future waste disposal tenders will be undertaken as part of the Health Service Quadrangle. This will involve the inclusion of other Area Health Services in the tender process to further improve efficiency and contain costs.

### **13. Home Health Care Waste – Clinical**

This section applies to those who provide home healthcare on a professional basis. While the patient is under the care of a professional health care provider and clinical/related wastes is generated, then waste should be managed in accordance with the industry code of practice (*3rd edition 2002*) for the management of clinical and related waste.

#### **13.1 Clinical Wastes**

Clinical waste is defined as having the potential to cause injury, infection or offence. Clinical waste includes dressings and disposable linen, which is heavily soiled with blood and body fluids. If a small amount of clinical waste is generated (e.g. dressings) in the home environment, this should be wrapped or secured and mixed with other waste and disposed of through the normal household waste stream. If there is a considerable amount of clinical waste, this should be placed in the approved yellow clinical waste bag, secured and transported to the nearest hospital site by the health provider. This is then disposed of as clinical waste.

##### **13.1.1 Segregation practices**

Sharps should be deposited into containers that comply with the relevant Australian Standard. (AS/NZ4031) Yellow rigid containers with the biohazard symbol for disposable sharp containers and (AS/NZ 4261) for reusable sharp containers.

Health carers have a duty of care to advise clients of safe disposal of sharps/needles that are used within the home. Clients should be encouraged to dispose their sharps through local council exchange programs or at the nearest hospital facility. This will eliminate the safety risks associated with disposal of needles in the normal household waste.

##### **13.1.2 Waste handling and transport**

Vehicles transporting sharps containers should be fitted with a bracket or velcro strapping to secure contents to avoid movement and leakage whilst in transit.

Waste collected by the health provider must be transferred to the nearest health facility.

##### **13.1.3 Clinical waste spillages**

Clean up bulk of spillage using appropriate PPE with disposable cloth/paper towel and dispose in yellow bag. Wash area with neutral detergent and shampoo carpeted area (spill kit should be kept in vehicle).

## **14. Home Health Services**

### **14.1 Dental Clinics**

Managers of Dental Clinics should be aware of the definition of Clinical Waste as contained in this manual in accordance with the Department of Health guidelines. Managers are responsible for the correct segregation of waste in their respective units and making staff aware of these.

Each dental clinic shall ensure that:

- General, clinical and recycling receptacles are provided in all areas of work.
- Rigid sharp containers are provided for the containment of sharps.
- Waste Storage areas are weatherproof and lockable whilst awaiting collection awaiting collection

#### **14.1.1 Amalgam/Mercury**

Mixing silver tin powder with liquid mercury makes dental amalgam. Amalgam is a repairing material used for tooth fissures and is formed in Dental Clinics by the use of single use alloy/mercury capsules. A small amount of amalgam waste is usually formed when a single use capsule is mixed.

The National Health and Medical Research Council recommends storing amalgam waste by immersing in used photographic fixer solution in an unbreakable screw top container and stored in a lockable cupboard in the Dental Clinic. A commercial metal recycling contractor collects these.

Extracted teeth containing dental amalgam are toxic and **should not** be disposed of as clinical or general waste. Attached amalgam waste should be collected in a separate marked container prior to collection by an external contractor.

State and local regulations should be consulted regarding disposal of the amalgam. (Reference Infection Control Guidelines for Dental Healthcare Settings (December 2003).

#### **14.1.2 Mercury Spill Kit**

Mercury spillages should be cleaned in accordance with the recommended Mercury spill containment procedures. Mercury spill kits are to be kept in dental clinics and by the environmental service Departments.

Mercury spill kit should contain at least:

- 2 unbreakable lidded containers
- spill sign
- pasteur pipette, eye dropper
- sodium thiosulphate
- face mask
- dusk pan and brush
- sulphur powder
- waste incident report form

## **14.2 Mobile School of Dental Screening Services**

School Dental Screenings involve staff from the Centre of Oral Health visiting schools for the purpose of checking children's teeth; a dental mirror and gloves are used as part of the procedure. If dental treatment is required, children are referred to dental clinics for treatment.

Clinical waste would not therefore be generated during the checking procedure. However, it is required that personnel attending dental screenings should be provided with disposable gloves and paper towels and a waste bag to contain the waste. These bags should be transported to the dental clinic for disposal.

## **14.3 Needle syringe exchange program now called "HIV and Hepatitis C" Prevention Service**

Large community sharp disposal bins are located at Blacktown, Mt Druitt, Doonside, Parramatta, Merrylands and Auburn Community Health Centres and Nepean. These are available for use to all those community members who are injecting drugs for any reason.

Clinical waste contractor empties these bins on a contractual basis. The Environmental Services Manager at both Blacktown and Mt. Druitt Hospitals holds the contract.

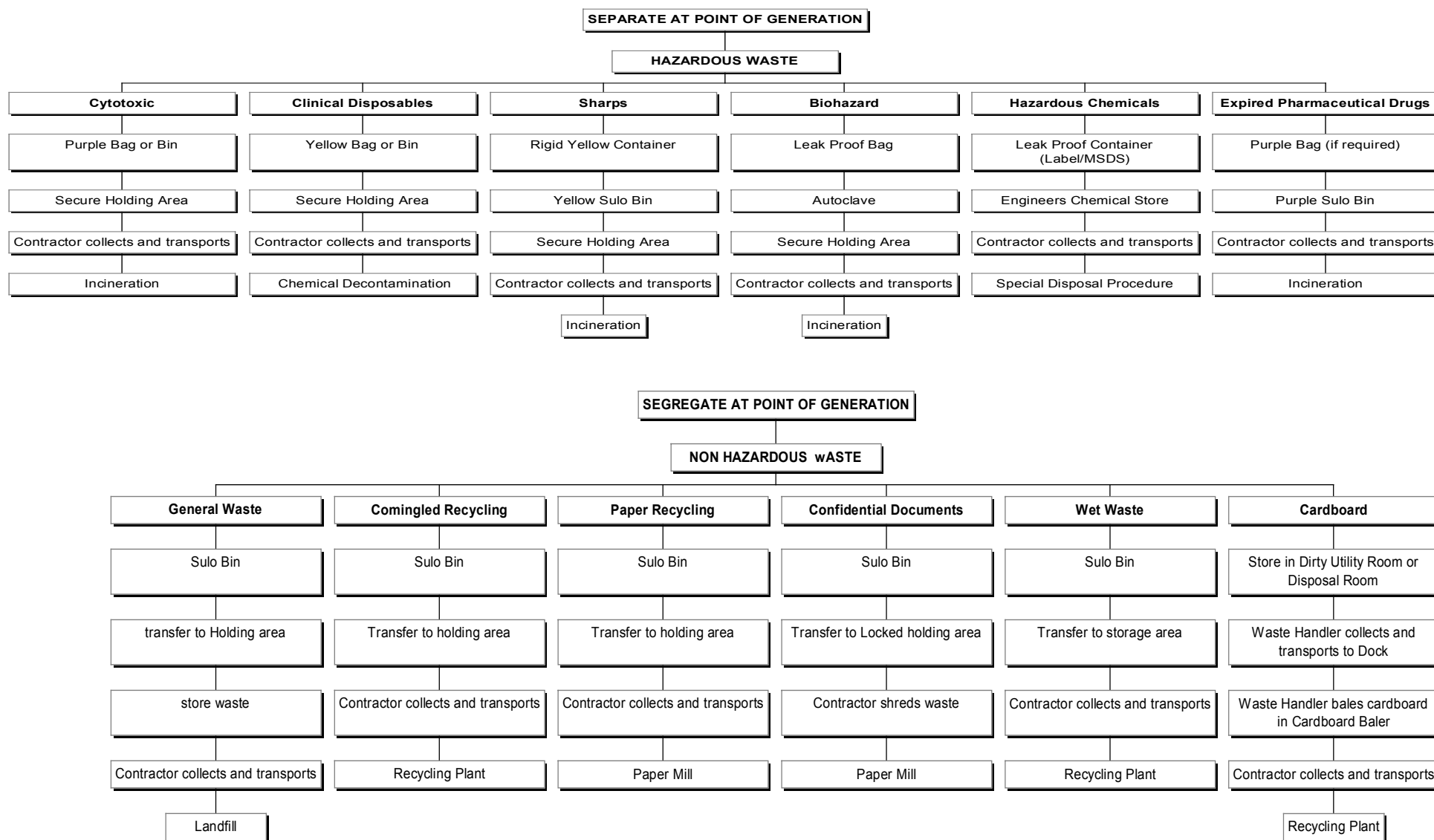
The HIV and Hepatitis C Prevention Service operates a "clean up" service, whereby known "hot spots" in the community are regularly patrolled and any sharps found are collected using an "easy reach" tool, and disposed of into a yellow sharps container. This sharps container is then deposited into the large yellow sharps bin at the appropriate Community Health Centre.

The HIV and Hepatitis C Prevention Service also respond to Needle Hotline (1800 needle) calls made by community members. When a community member calls the Needle Hotline to report discarded sharps, Hotline staff contact the closest HIV and Hepatitis C Prevention Service and staff will go to the site to collect the sharps, which are then disposed of in the same manner.

A Safe Work Practice/Safety Rules for Safe Sharps Retrieval has been developed and must be followed by all staff whenever undertaking sharps retrieval.

## Appendix 1: Waste Management Flow Chart

# WASTE MANAGEMENT FLOW CHART



Sydney West Area Health Service  
employees are committed to  
promoting and supporting a  
**Waste Management Program**  
that is safe, efficient,  
cost effective and  
protects the environment



### APPENDIX 3: Facility Waste Quarterly Report template

<b>Dept &amp; Facility:</b>	<b>Please OVERTYPE your facility's name HERE, Environmental Services</b>							
<b>Quarter Ending:</b>	<b>(overtyp e month, year)</b>							
<b>Type of Waste</b>	<b>Volume (kgs)</b>	<b>Volume (kgs)</b>	<b>Volume (kgs)</b>	<b>Total Waste Volume (kgs)</b>	<b>Total Waste Cost (\$)</b>	<b>Occupied Bed Days</b>	<b>KG per patient</b>	<b>Cost per patient</b>
	<b>MONTH</b>							
	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>					
<b>example of entries:</b>	2,188.00	2,948.00	3,632.50	8,768.50	\$ 9,164.00	10,393	0.84	\$ 0.88
<b>Clinical Waste</b>				-			#DIV/0!	#DIV/0!
<b>General Waste</b>				-		-	#DIV/0!	#DIV/0!
<b>Trade Waste</b>				-		-	#DIV/0!	#DIV/0!
<b>Food Waste</b> 240 ltr. = 25 kgs half full bin				-		-	#DIV/0!	#DIV/0!
<b>Commingled Waste</b> 240 ltr. bin = 28 kg per bin (full) 120 ltr = 14 kg per bin (full)				-		-	#DIV/0!	#DIV/0!
<b>Cardboard</b> 85 kg or 65 kg per bale depending on size of compactor				-		-	#DIV/0!	#DIV/0!
<b>Paper Waste</b> 240 ltr = 25 kgs. Per bin (full) 120 ltr = 12.5 kgs. Per bin full				-		-	#DIV/0!	#DIV/0!
<b>Security Waste</b> 240 ltr bin = 55 ltr. 120 ltr full bin = 27.5 kgs				-		-	#DIV/0!	#DIV/0!
		<b>Total Volume &amp; Cost</b>		-	\$ -			
<b>NB: Entries must be in kilograms IN DIGITS ONLY, using specified average weight not bin numbers</b>								
<b>Reports are due by the 20 Feb (for Dec Qtr); 20 May (for Mar Qtr); 20 Aug (for Jun Qtr); 20 Nov (for Sep Qtr) and are to be forwarded ELECTRONICALLY to Rita Granata, SWAHS Waste Management Coordinator - Thank you.</b>								
<b>Monthly figures for OBDs can be found on the Westnet Intranet site @ this link: <a href="http://10.60.64.102/Dashboard/production/webpages/occbcd13weeks.html">http://10.60.64.102/Dashboard/production/webpages/occbcd13weeks.html</a>. Click on the 13 Months button, then click the facility button and choose your facility. To reveal monthly OBDs, place curser on purple dot for each month of the quarter. You need to add them up manually.</b>								

## APPENDIX 4: Classification of Dangerous Goods

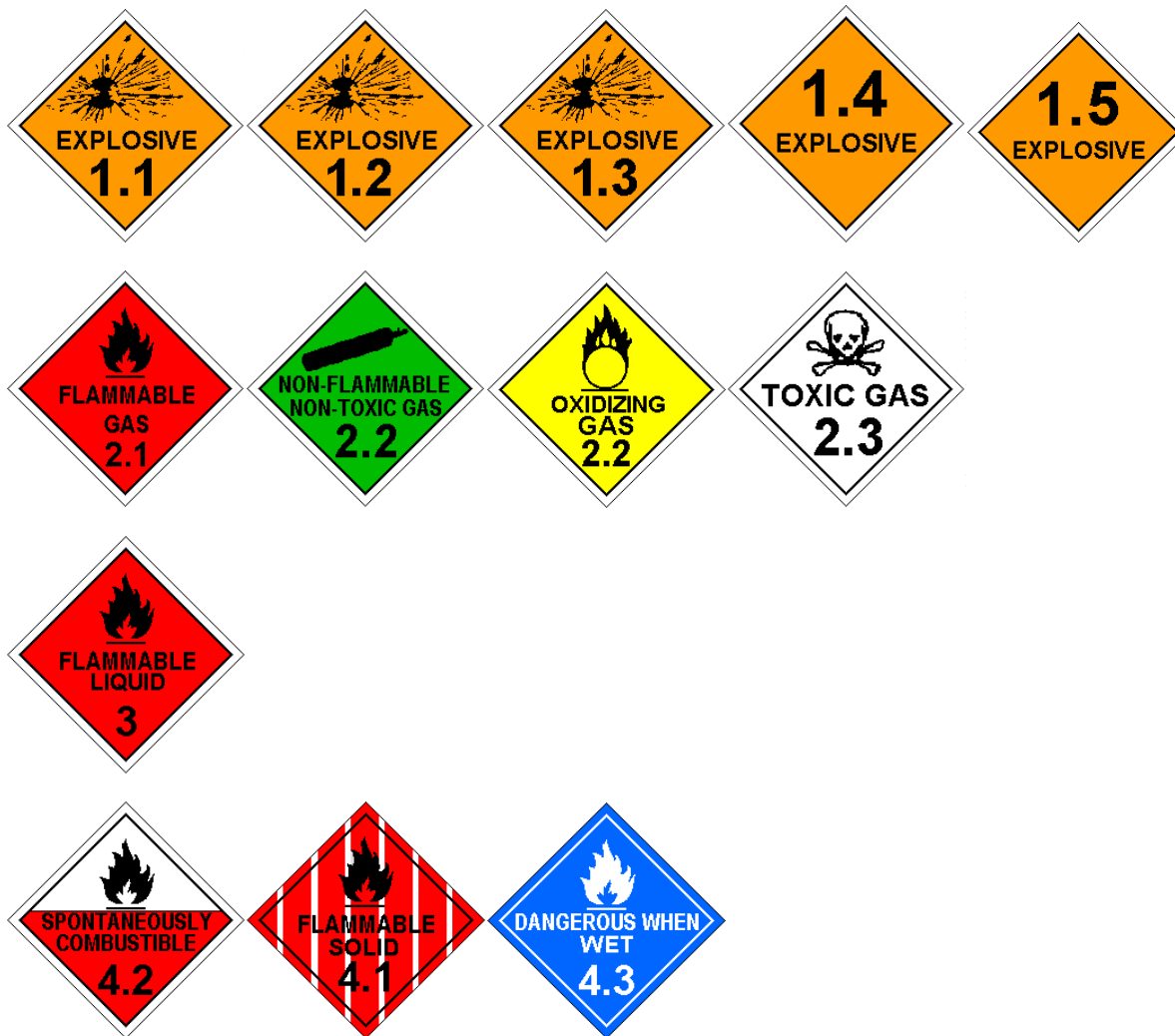
### Introduction

Dangerous goods are substances and articles that are potentially hazardous to people and property. They may be corrosive, flammable, explosive, oxidizing or reactive with water. Whatever their properties and their potential for injury and destruction, great care is needed in their handling, storage and transport.

The Dangerous Goods (Storage and Handling) Handling Regulations require that dangerous goods, i.e., certain chemicals and gases, be stored in accordance with the law. These Regulations are designed to prevent accidents involving the range of chemicals, which are known internationally as Dangerous Goods. These Regulations provide safety standards to protect worker, the community and the environment from the effects of fires, explosions and escapes of these Dangerous Goods.

### The Classification System

Australia has adopted a system of classification and labelling for dangerous goods based on the United Nations system used in other countries. This system helps people to quickly recognize dangerous goods, their properties and dangers.





- 1 explosives
- 2.1 flammable gas
- 2.2 non-flammable gas
- 2.2 oxidising gas
- 2.3 toxic gas
- 3 flammable liquid
- 4.1 flammable solid
- 4.2 spontaneously combustible
- 4.3 dangerous when wet
- 5.1 oxidising agent
- 5.2 organic peroxide
- 6.1 toxic
- 6.2 infectious
- 7 radioactive
- 8 corrosive
- 9 miscellaneous

