

Northern Sydney Health

# RNS Hospital Waste Management & Resource Recovery Plan

# 2004

Last Revised February 2004  
Endorsed for use on site by

.....  
03/07/2004

## Table of Contents

<b>1. GENERAL INFORMATION</b>	<b>3</b>
1.1 NSH Area Corporate Services Waste Management & Resource Recovery Policy .....	3
1.2 Waste Management & Resource Recovery Policy Objectives .....	3
1.3 Targets .....	3
1.4 Key Features of the Waste Management & Resource Recovery System .....	4
<b>2. RESPONSIBILITIES</b>	<b>6</b>
2.1 Employer's Legal Responsibilities .....	6
2.2 Employees Responsibilities .....	6
2.3 Waste Minimisation & Management Responsibility Structure .....	6
2.4 Site Waste & Resource Recovery Process Review Committee .....	7
<b>3. WASTE STREAM QUALITY ASSURANCE</b>	<b>9</b>
3.1 Auditing .....	9
3.2 Reporting .....	10
3.3 Bench marking .....	9
<b>4. EDUCATION AND TRAINING</b>	<b>11</b>
4.1 Waste Minimisation & Resource Recovery Training .....	11
4.2 Waste Handling Training & Management Resources .....	11
<b>5. SPECIFIC WASTE STREAM PRACTICES</b>	<b>12</b>
5.1 General Information for Handling Waste .....	12
5.2 Emergency Procedures and Incidents .....	13
5.3 Clinical Waste .....	13
5.4 Sharps (Clinical Waste) .....	14
5.5 Anatomical Waste .....	15
5.6 Cytotoxic Waste .....	15
5.7 Pharmaceutical Waste .....	15
5.8 Hazardous Substances .....	15
5.9 Radioactive Waste .....	16
5.10 Paper & paper towel .....	16
5.11 Confidential Paper .....	16
5.12 Cardboard .....	16
5.13 Plastic and Aluminium .....	16
5.14 Glass .....	17
5.15 Tin Cans .....	17
5.16 Toner cartridges .....	17
5.17 Furniture and Equipment .....	18
5.18 General Waste .....	18
5.19 Food Waste .....	18
5.20 Liquid Waste .....	19
SCHEDULE OF CONTRACTORS FOR EACH WASTE STREAM x SITE .....	20
Northern Sydney Health Environmental Management Policy .....	20

# 1. GENERAL INFORMATION

## 1.1 RNS Hospital Waste Management & Resource Recovery Policy

RNS Hospital is committed to develop implement and maintain a waste management and resource recovery system throughout all levels of the business, which:

- supports the NSH Environmental Management Policy
- avoids waste production through purchasing strategies, reuse, maximised recycling and proper handling and disposal of the remaining refuse
- complies with all relevant legislation relating to waste and resource recovery, environmental protection, and occupational health and safety, NSW Government Waste Reduction and Purchasing Policy, NSW DOH Infection Control Policy (02/45) and the NSW DOH Waste Management Guidelines for Health Care Facilities, Aug. 1998
- is based on measurable objectives and continual improvement methods, and
- will provide a safe work environment and protect the our environment from damage

## 1.2 Waste Management & Resource Recovery Policy Objectives

Our objective is to:

- Maintain the standards set by relevant professional and statutory bodies, ISO 14001:1996, ISO 9001:2000, ACHS EQulP 5.1.9 and other regulatory / legislative requirements
- Determine and meet the waste management requirements of all departments through structured and continued feedback
- Foster commitment from all staff and management to actively participate in waste avoidance, reduction, reuse and recycling programs
- Provide a continuing waste and resource management education program for staff to increase awareness of waste minimisation principles, Occupational Health and Safety issues and quality improvement ethics
- Establish and maintain effective mechanisms to monitor, review, analyse and evaluate the waste management system and enable its continual improvement
- Provide regular reports on the progress to Area Corporate Services Management, Hospital General Managers and Area Corporate Services Department Heads
- Establish systems for implementing and reporting progress of the NSW Waste Reduction and Purchasing Policy
- Develop benchmarking partnerships with facilities within and beyond Northern Sydney Health
- Provide a point of contact for Area Corporate Services quality improvement activities
- Promote a working relationship with preferred suppliers of Area Corporate Services products and services
- Manage the services within available resources
- Implement the Waste Management and Resource Recovery Operating Procedures and Work Instructions, throughout each facility to minimise the environmental impact of waste treatment and disposal

## 1.3 Targets

By the June 2004:

- 100% of managers trained in waste management and resource recovery
- No clinical waste corruption in any other waste stream

## 1.4 Key Features of the Waste Management & Resource Recovery System

- Waste stream segregation at the point of generation is achieved in order to constrain waste disposal costs, maximise reuse and recycling, and limit the impact on the environment.
- Waste and recyclable items are to be handled in accordance with the **Work Instructions** and **Operating Procedures** listed in the Section titled **Specific Waste Stream Practices**.
- Where ever possible, waste and recyclable items are collected and transported in Mobile Garbage Bins (MGB's) to the waste and recycling collection points on site. Mobile Garbage bins are used to enhance health and safety by reducing the risk of needle stick injuries and spillage.
- The Mobile Garbage Bins and / or their labels are colour coded where possible for each waste stream to assist the process of waste segregation.
- MGB's, and smaller bags and bins are conveniently located in or near each department and point of generation to enable segregation of all waste and recyclable resources into the appropriate streams.
- Separate programs have been developed for the collection and disposal of the following waste and recyclable items:

### Hazardous Substances

Clinical Waste  
Sharps (clinical waste)  
Anatomical waste  
Cytotoxic Waste  
Pharmaceutical Waste  
Chemicals & other hazardous substances  
Radioactive Wastes  
Fluorescent light tubes

### Recyclable Resources

Paper & paper towel  
Confidential Paper  
Cardboard  
Plastic & Aluminium  
Glass  
Tin Cans and steel  
Toner Cartridges  
Furniture & Equipment  
Food Waste  
Grease Trap Waste

### Non-Hazardous

General Waste  
Sanitary Waste

- External Contractors remove the majority of waste and recyclable resources from the hospital sites for processing or disposal
- To ensure that collection equipment and clearance frequencies meet the diverse needs of all departments on each site managers are provided with training and asked to:
  - review department operations;
  - identify waste reduction possibilities;
  - identify recyclable items;
  - define the required waste equipment (bins etc) and clearance frequencies;
  - raise management issues with the Site Waste & Resource Recovery Process Review Committee;
  - document their needs on the Waste Stream Protocol form.
- Following training Department Managers are required to document the Dept waste management needs on the **Waste Stream Protocol Form** ES-FM-01. The form is used as evidence of the Department participating in reducing, reusing , recycling and disposal of. It records who is responsible for transporting it, and where it is finally taken, prior to collection by the contractor. The form is kept on computer by the Environmental Services Manager and forms the basis for the equipment provision and clearance scheduling.
- Charts and labels are provided to assist understanding of streaming requirements and available equipment including the following:
  - 'Waste Container types, colours, areas allocated & collection process'.
  - Disposal Guideline charts for general and patient care areas, pharmacies, laboratory areas, food services and engineering and maintenance areas are available and provided to staff and management as reference guides.
  - Colour coded bin labels waste streams as required.

- Environmental Services staff transfer glass and tin / steel cans, waste furniture and equipment from the major sites to central collection centres or to the transfer station for recycling or disposal.
- Plastics and aluminium cans are taken from major sites by the Environmental Services staff to the collection cage at Macquarie or Royal North Shore Hospital to await collection by the contractor.
- All documents including the Environmental Management Policy, The Waste Management & Resource Recovery Policy, all Environmental Services Work Instructions and Operating Procedures are controlled through the Quality Assurance process to ensure they are reviewed regularly and current.
- To facilitate access by those that need it, the documents are available on the shared computer drive at each site, from the Environmental Services Manager's office and as part of course notes distributed to staff in training programs.
- Comprehensive waste minimisation and management training is available in a number of forms for different audiences:
  - Each department manager is required to attend the half hour Waste Minimisation and Management Training provided by Environmental Services;
  - New staff members are required to attend Orientation training, which includes a half-hour Waste Minimisation and Management Training session suited for managers and other staff. Department in-service training is also provided by Environmental Services or by the department manager using the training package provided on PowerPoint.
  - Existing staff may attend the waste training session within the Orientation training or departmental in-service training sessions.
  - Records of all trained staff and managers are kept and reviewed regularly to assess training levels against the Key Performance Indicator that 100% of managers should be trained.
- A process for training competency development and assessment is in place to ensure correct implementation of the work instructions and procedures.
- Two key performance indicators have been set:
  - 100% of managers on each site must be trained in waste minimisation and management
  - 95% of each waste stream should be correctly streamed.
- Cleaning staff who empty the bins and remove the wastes to central locations for disposal regularly monitor the waste streams to verify the Waste Management Service Plan. Poor segregation practices are documented on the Waste Quality Assurance Inspection Form. Bin type and placement is reviewed and if required training is provided for staff who have placed the wrong items in the bin. In addition, spot audits are undertaken in key areas. Findings are reported to the Environmental Services Manager and relevant department manager and the Waste & Resource Recovery Process Review Committee.
- Waste weight and cost statistics are regularly kept and reviewed.
- Most sites have a Waste & Resource Recovery Process Review Committee (or equivalent). The role of the committee is to monitor and review the waste management process, recommend changes, coordinate and coordinate amendments to Policy, Operating Procedures and Work Instructions.
- Benchmarking between the facilities is undertaken to assess progress.
- Avoidance strategies are encouraged through purchasing and reuse strategies:
  - Choosing products with reduced packaging
  - Choosing re-usable products in preference to disposable products.
  - Minimising draft printing.
  - Using electronic media e.g., email instead of paper
  - Printing on both sides of paper.
  - Reusing backs of paper for draft copy printing
  - Converting used paper to note pads
  - Reusing Sterile wrap (Kimguard) as drop sheets, table covers etc.

## 2. KEY RESPONSIBILITIES

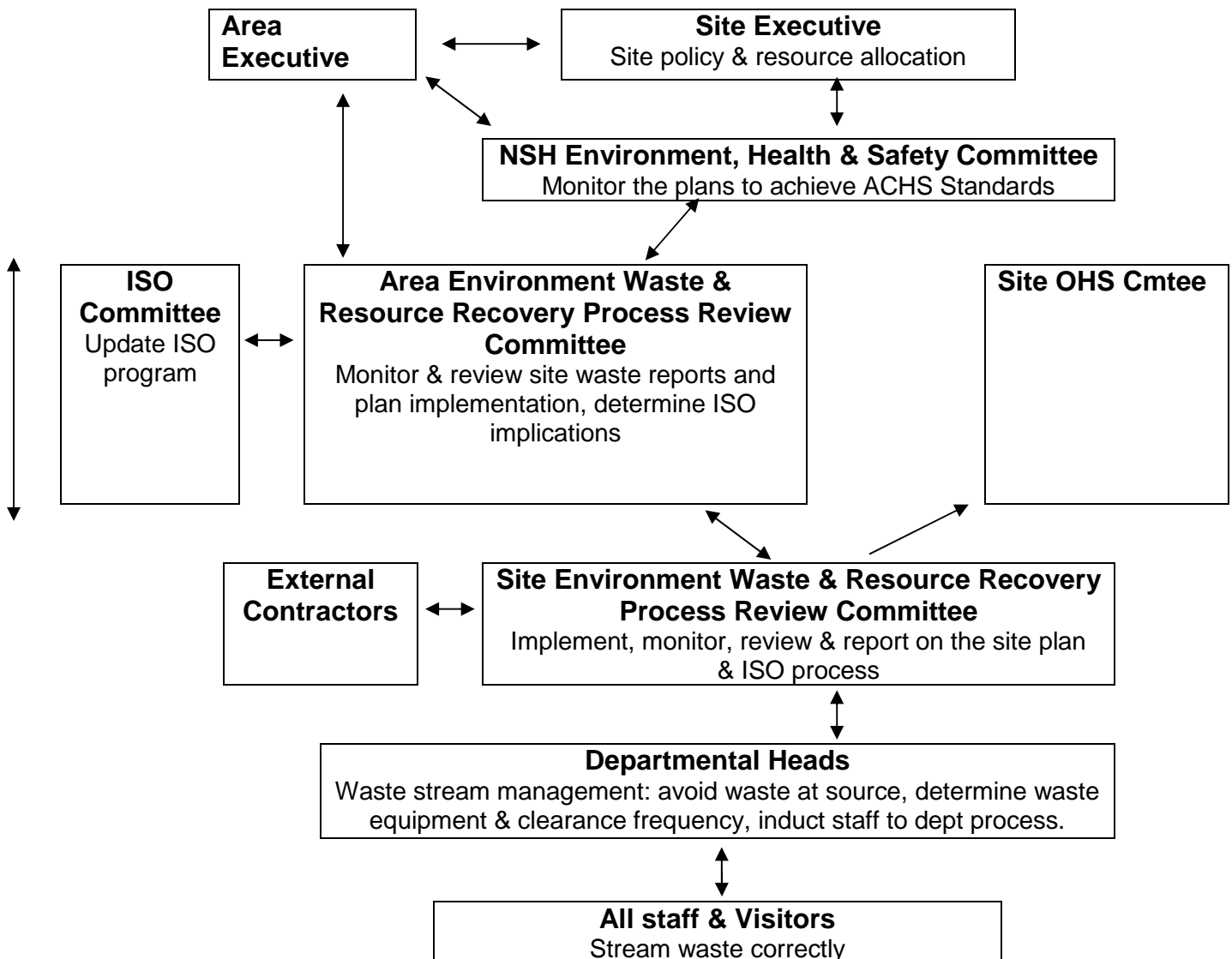
### 2.1 Employer's Legal Responsibilities

- Employers have a number of legal responsibilities, which include:
- developing and maintaining a safe work environment and safe work practices.
- 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.

### 2.2 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.
- actively supporting environmental initiatives.
- complying with the requirements for the handling of hazardous substances according to Material Safety Data Sheets (MSDS).

### 2.3 Waste Minimisation & Management Responsibility Structure



## 2.4 Area Environment, Waste & Resource Recovery Process Review Committee.

### Terms of reference

The terms of reference cover strategic planning and development, linkages with other organisations such as DOH, Area Health Services, EPA.

### Role

The Area Environment, Waste & Resource Recovery Process Review Committee is responsible for strategic development of waste minimisation and resource recovery activities. The Committee will work with the Site Environment, Waste & Resource Recovery Process Review Committee to implement the policy and plan.

### Reports Generated

- Environmental Risk Analysis (aspects & impacts) & Assessment Reports
- Process Review Report
- NSH Environmental Report
- Waste data
- Quarterly Waste Audit Report
- Training Log (Staff and Managers)
- ISO Recommendations Report
- WQAIR Issues
- Non Conformance Reports
- Reported issues and events
- Contractual issues
- ISO needs
- HIE costs
- Waste Reduction & Purchasing Policy Report
- WRAPP Annual Report

### Membership and Positions of Area Environment, Waste & Resource Recovery Process Review Committee

Position	Name	Contact Number	Responsibility
Asset Services Representative			
Supply Services Representative			
Laboratory Safety Representative			Standardisation, Financial and administrative support
Environmental Services Representative			Monitors contract performance. Conducts audits of the hospital.
Quality Representative			Monitors compliance with performance standards
Executive			Allocate resources, established priority
Infection Control			Monitors compliance with guidelines
Clinical Services			Advises on clinical impact issues
			Advises on operational issues
Others			Address service specific issues

## 2.5 Site Environment, Waste & Resource Recovery Process Review Committee.

## Terms of reference

The terms of reference cover implementation, monitoring, analysis, review and continuous improvement of the Waste Minimisation and Resource Recovery Plan, Policy and Procedures.

### Role

The Site Environment, Waste & Resource Recovery Process Review Committee is responsible for the development, implementation and evaluation of effective waste minimisation and resource recovery activities. The Committee will review the following topics and initiate / recommend action to achieve best practice in waste management within available resources. Without limiting the scope of the Committee, the role of the Committee is to:

- review the Waste Management and Resource Recovery system, Policy and Procedures annually, including the waste management structure, performance management, the waste stream definitions and strategies, procedural guidelines, reporting procedures, purchasing and product evaluation;
- review waste handling, containment and transportation including handling procedure, separation of waste streams, microbiological and pathological waste housekeeping, waste bags, trolleys, bins, holding areas, motor vehicle transport and tracking.
- support implementation of ongoing waste reduction initiatives including re-use, recycling and minimisation;
- review the **Waste Quality Assurance Inspection Reports** ES-FM-08
- review the **Environmental Risk Assessment Reports** ES-FM-04 and Waste Management incidents/accidents reports;
- review occupational health and safety issues including hygiene, manual handling, personal protective equipment provision and use, sharps injuries and vaccination programs.
- undertake audits and review audit procedures and results;
- document review findings, recommendations, tasking and timings on the **Process Review Report** ES-FM-14
- liaise closely with the Occupational Health and Safety Committee, Infection Control Committee and Product Evaluation Committee on Waste Management Issues;
- review literature and implement Standards for waste management;
- review training needs, competencies and training programs including manager training, employee orientation, publicity and promotion and continuing education.
- review waste data tables and other statistics
- review cost effectiveness of waste minimisation and management strategies.
- Review ISO Work Instructions, Operating Procedures and supporting documents and coordinate update and distribution of relevant documentation.
- Review HIE costs.
- review **Non-conformance Reports** CM-FM-08

### Reports Generated

- |                                     |                              |
|-------------------------------------|------------------------------|
| • Process Review Report             | • ISO Recommendations Report |
| • Waste Data Spreadsheets           | • Non Conformance Reports    |
| • Waste Audit Report                | •                            |
| • Training Log (Staff and Managers) |                              |

### Reporting

The Site Waste & Resource Recovery Process Review Committee reports to the site Environmental and safety Steering Committee and when required to the Area Environment, Waste & Resource Recovery Process Review Committee.



## Manly Hospital Waste Process Review Committee

Position	Name	Contact Number	Responsibility
Corporate Services Representative	Stuart Jones	9887 5575	Standardisation, Financial and administrative support
Site Environmental Services Manager	Vic Edwards		Monitors contract performance. Conducts audits of the hospital.
Quality Representative			Monitors compliance with performance standards
Executive			Allocate resources, established priority
Infection Control Practitioner			Monitors compliance with guidelines
Clinical Services			Advises on clinical impact issues
Environmental Staff Rep			Advises on operational issues
Others			Address service specific issues

## 3. WASTE STREAM QUALITY ASSURANCE

### 3.1 Auditing

#### Waste Quality Assurance Inspection Report

Regular audits of the various waste streams are undertaken by the Environmental Services Department to determine waste management performance, confirm waste segregation practice and benchmark against waste targets and other hospitals. Audits take a range of forms.

The **Waste Quality Assurance Inspection Report** [ES-FM-08] form is used to report the waste stream practices when a problem has been observed with the segregation or disposal process. Members of the Environmental Services complete the form and copies are kept in each Department in the Cleaners room. Incorrect items observed for the waste stream are identified by placing a tick in the box next to items found which should have been placed in another waste stream. The comment box is used to identify other issues about the waste stream such as overflowing or broken bins. The form is given to the Environmental Services Manager or to the team / shift supervisor who will forward it to the Environmental Services Manager. The Environmental Services Manager will provide copies to the Dept Manager and ensure that the follow up action is implemented and the process is signed off following completion. The **Waste Quality Assurance Inspection Reporting** [ES-WI-102] documents the process.

#### Department Audits

The key departments of Emergency, Theatres, Maternity, ICU, Catering and randomly chosen wards are audited by Environmental Services staff to enable waste management benchmarking across the sites.

Audits should be undertaken with the involvement of the Site Waste & Resource Recovery Process Review Committee and the staff from the area being audited. The aim of the audit is to measure the amount of improperly disposed of waste items and obtain corrective action from staff at the point of waste generation. The area to be used for the audit should be sealed from view. Floor drainage to the sewer is required.

The equipment to be used is as follows:

- Bench with impervious surface
- Waste separating containers
- Blade/knife/tongs
- Goggles, mask, gown and gloves
- Yellow bags/opaque bags
- Scales

•

#### Procedure:

1. Record waste type, origin and weight
2. Cut open the bag and if necessary empty onto table
3. Segregated contents into correct streams
4. Weigh and record weights of the correct streams.
5. Dispose of waste
6. Complete the Waste Audit Report
7. Provide copy of report to Manager and staff of area audited
8. Visit site and devise plan to improve performance

### Environmental Risk Assessment Report

The Manager should use the **Environmental Risk Assessment Report** [ES-FM-04](#) to review, assess and document any hazards, risks or issues in their area, make recommendations, and direct the information to those people who are able to fix the problem. If the problem cannot be fixed locally the report is directed to whoever must accept the risk and responsibility for not fixing it. Copies should be provided to the Site Waste & Resource Recovery Process Review Committee for action. A risk or hazard is anything that is likely to cause injury or damage to people or the environment. This may include unsafe work practices, dangerous goods or equipment, chemicals that could cause harm, poor waste management, water or energy wastage, poor purchasing practices etc.

## 3.2 Reporting

### Waste Data Reports

Hospital staff regularly weigh Clinical, General and Health Care Facility Waste bins. All clinical waste bins are tagged with barcodes provided by the clinical waste contractor and the weights are recorded against the departments generating it. Other waste streams are not bar-coded but, where possible, the weights or bin numbers collected are recorded. Waste generated per operation, birth and bed day is generated from these figures. The results are used for benchmarking purposes.

## 3.3 Benchmarking

### Recording

Monthly Clinical Waste weights are compared for the number of births, operations, and bed days at the Hospital each month. This enables the performance to be tracked for Clinical Waste Kg/ birth,/ operation, / bed day .

Comparisons can be made with other Hospitals

## 4. EDUCATION AND TRAINING

### 4.1 Waste Minimisation & Resource Recovery Training

Programs are in place to enable all staff and management within Northern Sydney Health facilities to attend a half-hour training course in waste minimisation and management. It is a key performance indicator that 100% of managers attend the training. Courses are run quarterly at each site specifically for managers. In addition, each site has Orientation training that includes a 20 minute to half-hour waste management session to a level suitable for staff and managers. All staff are able to attend this session.

The course covers the following:

- Hospital Waste Policy
- Legal Requirements & Responsibilities
- The reasons for waste segregation including costs
- Hospital Waste Streams
- Management tools and systems
- Our Role

### 4.2 Waste Handling Training & Management Resources

The resources available to managers and staff through the training include the following

- **NSH Area Corporate Services Waste Management & Resource Recovery Policy** ES-PO-02
- NSH Environmental Management Policy
- **Waste Stream Protocol** ES-FM-01,
- **Waste Container types, colours, areas allocated & collection process** ES-SD-03
- **Patient and general areas- Waste Disposal Guidelines** ES-SD-02A .
- **Pharmacy Waste Disposal Guidelines** ES-SD-04
- **Laboratory Waste Disposal Guidelines** ES-SD-06
- **Waste Disposal Guidelines for Macquarie** ES-SD-07
- **Food Services Waste Disposal Guidelines** ES-SD-..
- **Asset Services Waste Disposal Guidelines** ES-SD-..
- **Waste Quality Assurance Inspection Report** ES-FM-08
- **Environmental Risk Assessment Report** ES-FM-04

## 5. SPECIFIC WASTE STREAM PRACTICES

### 5.1 General Information for Handling Waste

#### Hygiene

- ALL staff who handle waste are to wash hands thoroughly after collection.
- All transport trolleys, garbage room, and truck to be cleaned when soiled.

#### Occupational Health & Safety Precautions

Copies of the Occupational Health and Safety Act and Regulations are available through the Department of Occupational and Staff Health. All staff who handle waste and recyclable materials:

- Receive training in all relevant Work Instructions and Operating Procedures. Training includes infection control, personal hygiene, safe handling techniques, correct use of Personal Protective Equipment, spill management procedures and the requirements of the Occupational Health and Safety Act 1983
- Are issued with a comprehensive statement of duties and standard operating procedures and work instructions
- Are issued with appropriate Person Protective Equipment and compelled to wear it while handling waste
- Have access to equipment and facilities that minimise manual handling and promote personal hygiene
- Have access to and are familiar with Material Safety Data Sheets (MSDS) for all chemicals used
- Are aware of the requirements of the Infection Control Policy (02/45)
- Are offered appropriate vaccination. Staff vaccination records are kept by Staff Health

Staff are required to:

- Carry out their work in accordance with the Work Instructions and Operating Procedures.
- Immediately report all waste handling injuries and incidents to the individual's supervisor. (Incidents and injuries are recorded on an Accident / Incident report form and investigated by the relevant supervisor / manager of the injured person. Preventive action will be initiated as soon as practical and a report submitted to the Occupational Health and Safety Committee.)
- Handle all waste as if potentially hazardous.
- Wear gloves when handling waste.
- Report any problems with equipment such as garbage trolleys and MGB's so they can be maintained in good working order.
- Ensure garbage trolleys are not overloaded.
- Transport general waste and clinical waste separately.
- Strictly follow all manual handling and back care practices.

#### Cleaning of Waste Collection Areas and Equipment

- Garbage or waste containers should be cleaned in hot soapy water and dried.
- The waste collection areas must be kept free from vermin ie. flies, rats, cockroaches etc.
- The presence of vermin must be reported immediately to the Environmental Services Supervisor, the Infection Control Clinical Nurse Consultant and the Maintenance Dept.

## 5.2 Emergency Procedures and Incidents

### Incident reporting

In the event of the following occurrence an Incident / Accident report form should be completed and the Environmental Services Manager notified immediately:

- In case of spillage;
- If sharps or contaminated objects are found in the incorrect waste stream;
- If sharps or non-contaminated waste is found in contaminated waste bins;
- If sharps containers are found with the inappropriate objects;
- If an injury occurs.

The application of appropriate precautions for each of these incidents should be included in the response to the above incidents. Follow up Procedures for anyone who has received a needle stick injury are contained in the Policy for Needlestick Injury or Blood and /or Body Fluid Exposure. Contact DOSH immediately for further information.

### Incorrect Segregation of Clinical waste into the General Waste Stream

If clinical waste is found to be in the general waste stream when it gets to the tip, the tip management should contact the Waste Services NSW. Waste Services NSW Centre Manager will contact the NSH Manager Environmental Services (MES) The MES will go to the tip with the 'General Waste Emergency Response Kit' and await the arrival of the Waste Services NSW Centre Manager who will adjudicate regarding the waste and further action.

## 5.3 Clinical Waste

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

- human tissue (excluding hair, teeth and nails);
- bulk body fluids and blood;\*\*
- 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;

unless treated to standards approved by the Director General of NSW Health.

\*\* Bulk: Free flowing liquids normally contained within a disposable vessel or tubing, not capable of being safely drained to the sewer.

### Waste removal

Waste should be removed in accordance with the following Work Instructions

- **ES WI 108 Emptying Small Clinical Waste Bins**
- **ES WI 109 Collection of Clinical Waste MGB's**
- **ES WI 112 Clinical Waste Tracking and Recording**
- **ES WI 113 Clinical Waste Invoice Payment**

## Spill Kits

A Spill Kit is to be maintained at the Clinical Waste Disposal Point containing:

- Broom, mop and mop bucket
- a large (10 litre) reusable plastic container or bucket with fitted lid, containing;
- 2 plastic general waste garbage bags for the disposal of any general waste;
- 2 Clinical waste bags for the disposal of Clinical waste;
- a pan and scraper;
- disposable rubber gloves suitable for cleaning
- neutral detergent
- disposable cloths and sponges
  
- disposable overalls
- heavy duty gloves suitable for handling Clinical waste
- eye protection
- a plastic apron
- a mask (for protection against inhalation of powder from disinfectants, or aerosols generated from the spills).
- incident report form
- waste spill sign

## Management of spills of clinical waste

Spot cleaning and larger spills should be managed in accordance with the following Work Instructions:

**Management spills of clinical waste** [ES- WI-87](#)

## Clinical Waste Tracking

Bar codes must be placed on all clinical waste bins to enable waste tracking.

**Clinical Waste Tracking and Recording** [ES-WI-112](#).

## 5.4 Sharps (Clinical Waste)

Sharps are classified as 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.

## Specifications for Sharps Disposal Containers

Australian Standards compliant containers are to be used for the safe disposal of sharps in all medical/laboratory situations. Reusable containers are to be used where possible to minimise waste.

## Waste removal

Waste should be removed in accordance with the following Work Instructions

**Safe handling, removal & disposal of sharps containers** [ES WI 68](#)

## Storage of clinical and sharp waste after removal from clinical areas

- The storage area is to be locked.
- The presence of vermin must be reported immediately to the Supervisor of Cleaning Services, the Infection Control Clinical Nurse Consultant and the Maintenance Dept.
- A record shall be kept of the collection dates and names of transportees in respect of contaminated waste for a period of twelve (12) months.

## Tracking

Although Sharps are a form of Clinical / hazardous Waste, at this stage the EPA does not require the sharps waste to be tracked.

## 5.5 Anatomical Waste

Anatomical waste comprises human tissue and body part waste arising from theatre, the mortuary or laboratory investigations. Within NSH Anatomical waste is separated from other clinical wastes for incineration.

### Waste removal

Waste should be removed in accordance with the following Work Instructions

**Collection of Anatomical Waste MGB** [ES WI 107](#)

## 5.6 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.

### Waste removal

Waste should be removed in accordance with the following Work Instructions

**Collection of Cytotoxic Waste MGB** [ES WI 106](#)

### Management of spills of cytotoxic waste

Spot cleaning and larger spills should be managed in accordance with the following Work Instruction

**Management spills of cytotoxic waste** [ES WI-130](#)

## 5.7 Pharmaceutical Waste

Consists of pharmaceutical 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.

### Waste removal

Waste should be removed in accordance with the **Pharmacy Waste Guidelines** [ES SD 04](#)

## 5.8 Hazardous Substances

Chemical waste is generated from the use of chemicals in medical applications, domestic services, maintenance, and laboratories, during sterilisation processes and research. It includes mercury, cyanide, azide, formalin, and solvents, 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

### Disposal

Reference should be made to the Material Safety Data Sheet, which can be obtained, from the manufacturer and supplier for handling precautions, instructions and the person protective equipment, which is necessary for staff protection. A register of MSDS is held in the Emergency Department.

WorkCover and EPA are to be contacted for information regarding specific chemicals. Reference should also be made to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

### Waste removal

Waste chemicals should be removed in accordance with the following Work Instructions

**Regular Chemical Waste Collection** [ES OP 01](#) & **Chemical Collection Requirements** [ES-FM-03](#)



## 5.9 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. Reference should be made to the *Radiation Control Act 1990* and the *Radiation Control Regulation 1993*.

Radioactive waste, once lead shielded and allowed to decay to a safe level as set by the regulatory authority, is no longer deemed to be radioactive waste. Certain radioactive wastes are classified as hazardous waste in the *Waste Regulation*.

## 5.10 Paper & Paper Towel

Includes used paper hand towel, office paper, newspapers, magazines (staples and clips included), shredded paper and light-weight and small cardboard boxes.

### Waste removal

Waste should be removed in accordance with the following Work Instructions

**Emptying Small Paper Bins** [ES- WI-105](#) & **Collection of recyclable waste paper** [ES-WI-104](#)

## 5.11 Confidential Paper

Any paper item that contains patient identifying information, commercial in confidence information, human resource records,

### Waste removal

Waste should be removed in accordance with the following Work Instructions

**Collection of Confidential Waste Paper** [ES WI 101](#)

## 5.12 Cardboard

Cardboard is split into two categories: cardboard boxes that are **not** suitable for sale or reuse and those which are. Good quality boxes are separated into batches of standard size boxes, such as Baxter boxes and sole for reuse.

### Waste removal

Waste should be removed in accordance with the following Work Instructions

**Collection of recyclable cardboard waste** [ES WI 98](#),

**Garbage compacter and bin lifter operation** [ES-WI-14](#),

## 5.13 Plastic and Aluminium

Plastics for recycling include items with numbers 1,2,3,4 or 5 on the base usually with a recycling symbol also.

1 – PET Polyethylene Tetraphthalate – soft drink, water, juice, detergent, turps, meths, kero clear and coloured bottles, blister pack food trays.

2 – HDPE Hi-density Polyethylene – milk bottles, sauce cordial and juice bottles; margarine containers; shampoo, conditioner bottles; food trays and toner bottles; cleaner, disinfectant & detergent bottles and drums; medical bottles.

3 – PVC Poly Vinyl Chloride – plumbing pipes & fittings, cordial & juice bottles, blister packs

4 – LDPE Low density Polyethylene – garbage bins, black irrigation tubes, ice cream and other lids, soft plastic bottles

5 – PP Polypropylene – plastics suitable for microwave use, ice cream containers, baby baths, plastic hinged lunch boxes, juice and sauce bottles; cleaning liquids; wrapping plastics excluding chip packets and other wrappers.

Aluminium items including soft drink cans, foils and trays.



**Waste removal**

Waste should be removed in accordance with the following Work Instructions

**Collection of plastic and aluminium for recycling** [ES-WI-118](#)

## 5.14 Glass

All Glass containers clear and coloured.

**Waste removal**

Waste should be removed in accordance with the following Work Instructions

**Collection of Glass containers for recycling** [ES-WI-03](#),

## 5.15 Tin Cans

All tin cans, including those from kitchens that have been emptied and rinsed.

**Waste removal**

Waste should be removed in accordance with the following Work Instructions

**Collection of Tin Cans for recycling** [ES-WI-117](#)

## 5.16 Toner cartridges

**Waste removal**

Toner cartridges are removed in accordance with the following Operating Procedure

**Collection of Toner Cartridges for recycling** [ES-OP-122](#)

## 5.17 Furniture and Equipment

Waste furniture and equipment is split into two categories: Junk or broken furniture and equipment that is collected for transport to the tip; and obsolete surplus or out of date furniture and equipment which is in working order but which cannot be used in Australia, is collected for use overseas.

### Waste removal

Waste should be removed in accordance with the following Work Instructions

**Waste furniture and equipment collection** [ES-WI-09](#)

## 5.18 General Waste

According to the EPA and NSW DOH general waste is defined as any waste not included above, which is not capable of being composted, recycled, reprocessed or re-used. The NSW Health Dept. Guidelines include incontinence pads, sanitary waste and disposable nappies in this category. However, because of administrative restrictions imposed by NSW Waste Services, general waste is split into two categories, 'General waste' and 'Health Care Facility Waste' (HCFW).

NSW Waste Services have deemed waste generated in patient care areas within the Health industry as 'Health Care Facility Waste' or 'Sanitary Waste'. It consists of, disposable incontinence pads, sanitary napkins, tampons, drained dialysis wastes, nappies, and other sanitary wastes resulting from the control of body fluids. Health Care Facility Waste must not be taken to transfer stations and is accepted only at landfills where the waste is handled separately to avoid contact with workers and machinery, and to minimise any nuisance.

Waste generated in the kitchens, maintenance, engineering and office areas within the health industry, is accepted at the transfer station by NSW Waste Services.

### Waste removal

Waste should be removed in accordance with the following Work Instructions, as appropriate

**Collection of general MGB** [ES WI 96](#)

**Collection of Health care facility MGB** [ES WI 99](#)

**Collection of small general MGB** [ES WI 97](#)

## 5.19 Food Waste

This includes all production and plate return food scraps, serviettes, paper bags, menus and wooden stirrers. Single serve food portions which are unopened or nearly full, such as butter, jam, milk and juices, are included.

### Waste removal

Waste should be removed in accordance with the following Work Instructions

**Collection of Food Waste for recycling** [ES-WI-135](#)

## 5.20 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.

### Waste removal

Waste should be removed in accordance with the following Work Instructions

- ES-OP-??

Grease traps may be serviced with bio-degrading systems. Pump out of traps is in accordance with the following schedule: **To be filled out by Maintenance Dept.**

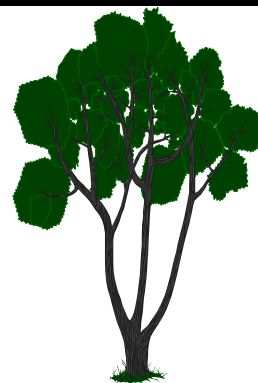
Location	Bio system Company	Cost	Pumpout Service	Cost	EPA Licence Number

### SCHEDULE OF CONTRACTORS FOR EACH WASTE STREAM x SITE

Waste Type	Name of Contractor and/or Transporter	Address	Contract Expiry	Contact Phone	Trade Waste License No.	Method of Treatment	Final Destination
Clinical Waste	Stericorp	2 Wiblen St Silverwater 2141	2004	97484552		chemical	landfill
General Waste	Collex – Ryde Hospital Sita – RNSH, Hornsby Jaynar – Macquarie URM-Manly, MonaVale	2/25 South St Rydalmere 2166 9 Hunter St Sydney  Crozier Rd Belrose		1300134640 8227 4111  9450 1577		compaction	landfill
Sharps	Stericorp	2 Wiblen St Silverwater 2141	2004	97484552		chemical	landfill
Cytotoxic/Anatomical	Stericorp	2 Wiblen St Silverwater 2141	2004	97484552		incineration	landfill
Grease Trap	Collex	2/25 South St Rydalmere 2166		1300134640		Reuse	
Hazardous Chemicals	Chemsal Pty Ltd All sites	12 Bushells Place Wetherill Park 2164	2003	96047533		mixed	
Pharmaceutical	Stericorp – All sites	2 Wilben St Silverwater 2141	2004	97484552		incineration	landfill
Radioactive	Chemsal Pty Ltd	12 Bushells Place Wetherill Park 2164		96047533		Storage/decay	landfill
Lead	Chemsal Pty Ltd	12 Bushells Place Wetherill Park 2164	2003	96047533		recycling	landfill
Paper	Visy					recycling	
Cardboard	Visy					recycling	
Reusable boxes	Enmore Box Company	29-35 Cowper St Marrickville 2204		95602866		reuse	
Plastics & Aluminium	Donmar Industries	21-25 Day St Lansvale 2166	2003	97553305		recycling	
Glass	Zig Zaag					recycling	
Food Waste	CBD Enviro Services RNSH, Hornsby, Ryde, Manly, Mona Vale	330 Wattle Street Ultimo		9211 1815		recycling	
Tin Cans	NSH Enviro. Services to transfer station					recycling	
Organic Products						dewatering	landfill
Mercury / amalgam	Chemsal Pty Ltd	12 Bushells Place Wetherill Park 2164		96047533		recycling	
x-ray film						recycling	
Batteries						none	landfill
Silver						recycling	
Out of date equip. etc	AFAP					Reuse OS, schools, etc	
Junk equipment	NSH Enviro. Services					none	landfill
Computers							
Others							

# Environmental Management Policy

The Northern Sydney Area Health Service recognises the link between public health and the environment. As part of its commitment to being a leader in environmental management, the Northern Sydney Area Health Service will seek to implement change that ensures that its activities are undertaken in a manner consistent with best environmental and health and safety practice. Specifically, the Northern Sydney Area Health Service seeks to ensure that it understands the effects of its activities on the environment and will continually aim to improve its environmental health performance.



## The Northern Sydney Area Health Service will:

### 1. General

- a Adopt the principles of ecologically sustainable development in the management and use of resources;
- b Implement a systematic and integrated Environmental Management System, that will employ best practice principles and health promotion practices, to reduce harmful impacts on the environment;
- c Integrate environmental health and safety planning processes into all strategic plans, business plans and budgets;
- d Integrate environmental responsibilities into all individual roles and job descriptions;
- e Undertake a program of environmental assessment to quantify costs associated with implementing sound environmental practice and investigation of strategies to minimise environmental impacts, (Green Health Care Environmental Assessment Manual, AHA/EPA, 1996; AS/NZ/ISO 14000 Series Environmental Management Systems Standards);
- f Develop and trial environmental initiatives in consultation with all who are to be affected;
- g Pursue a process of continual improvement in environmental performance;
- h Pursue a program of benchmarking environmental initiatives with organisations within health and other industries;
- i Work with others to counteract the pressures towards harmful products, resource depletion, unhealthy living conditions, poor nutrition, and to focus attention on public health issues such as pollution, occupational hazards, housing and settlements. (World Health Organisation Ottawa Charter 1986 );
- j Go beyond legal requirements for environmental performance wherever possible;
- k Document all policies and procedures in a Model Environmental Management Procedures Manual;
- l Make this policy publicly available.

### 2. Education and Training

- a Communicate and implement this policy within all programs, activities and services within the NSAHS and individual organisations;
- b Promote and undertake environmental education / awareness programs for all employees and train key people in environmental performance standards and requirements.

### 3. Resource Consumption/Purchasing

- a Develop an Environmental Purchasing Policy based on a 'life cycle analysis' approach to the purchase of goods and services;
- b Seek to buy goods and services with the most beneficial environmental impact.

### 4. Waste Minimisation

- a Adopt an avoid, reduce, reuse, recycle approach to the generation of waste products.

### 5. Water Conservation

- a Determine reduction levels in water consumption and meet such performance targets.

### 6. Energy Conservation

- a Determine reduction levels in energy consumption and meet such performance targets.

### 7. Building and Development

- a Employ, where practicable, environmental best practice principles in all building and renovation projects.

### 8. Pollution Control

- a Reduce greenhouse gas emissions to (at least) that of government targets, and phase out all non-medical ozone depleting substances;
- b Determine reduction levels for soil, air and water pollution and meet such performance targets;
- c Incorporate environmental disaster management into disaster plans.

### 9. Nature Conservation

- a Minimise the impact that the organisation has on the natural environment, thus restoring, maintaining and / or enhancing biological diversity and integrity within the organisation's grounds.

**Acknowledgments:** A number of sources were used in the development of this document including the staff of the hospitals and other health care organisations within the NSAHS, the Australian Hospitals Association and John Hunter Hospital. **Endorsed by Area Executive May 26, 1997.** **Last Revised: August 2002**