



18 October 2024

Operational Waste Management Plan

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**Cessnock Hospital Redevelopment
Health Infrastructure and Hunter New England LHD**

Turner & Townsend Pty Ltd
Level 19
One Wharf Lane
171 Sussex Street
Sydney NSW 2000



Health

t: +61 (0)2 8245 0000
w: www.turnerandtownsend.com

Health Infrastructure and Hunter New England LHD

Cessnock Hospital Redevelopment

Purpose

This Operational Waste Management Plan has been prepared by Turner and Townsend on behalf of Health Infrastructure to assess the potential environmental impacts that could arise from the redevelopment of the Cessnock Hospital health service at 24 View Street, Cessnock.

This report has been prepared to outline the proposed plan to manage operational waste on site at completion of the project.

This report accompanies a Review of Environment Factors that seeks approval for the construction and operation of a new two-storey clinical services building including:

- Demolition of select existing structures
- Construction of a new hospital building on the site's northern portion
- Realignment of internal roads and a new primary vehicular and pedestrian entrance to the hospital campus from Jurd Street
- Refurbishment of the existing at-grade car park
- Installation and realignment of selected services
- Installation of ancillary development including, but not limited to, lighting and signage.
- Landscaping
- New kerb, gutter and road resurfacing of Jurd Street.

For a detailed project description, refer to the Review of Environmental Factors prepared by Ethos Urban.

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- Clinical waste
- Pharmaceutical waste
- Anatomical waste
- Cytotoxic waste
- Sharps
- eWaste recycling
- Battery recycling
- Printer Cartridge/Toner Recycling
- Secure Document Destruction
- Secure eWaste Destruction
- Soft Plastic Recycling
- Metal Recycling
- Rigid Medical Plastic Recycling (i.e. items not eligible for co-mingled recycling)
- Intershred

Wherever possible, streaming will occur at point of disposal.

Quantities of these likely waste stream have been calculated using data provided in:

- PD2017_026 District Waste Management Plan
- Dangerous Goods Management Report (GHD Consultants 05/24)
- Benchmarks from other recent hospital developments

Logistics of managing the waste streams have been assessed and are proposed to be serviced as per the below tables:

Waste Stream	Assets	Frequency
General Waste	General Waste Compactor	3 x Weekly (M, W, F)
Co-Mingled Recycling	660L for internal use	Weekly
Paper / Cardboard Recycling	660L for internal use	Weekly
Food / Garden Organics	240L Bins	Requirement to go to registered FOGO facility in place by 2025
Clinical Waste	240L Bins	Weekly (Tues)
Cytotoxic Waste	240L and 120L Bins	Weekly (Tues)
Pharmaceutical Waste	120L Bins	Weekly (Tues)
Sharps	19L Bins	Fortnightly (Wed)

Table 1: Waste Quantities and Service Frequency for External Bins

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Waste Stream	Assets	Frequency
Clinical Waste	240L Bins	Weekly (Tues)
Cytotoxic Waste	240L and 120L Bins	Weekly (Tues)
Pharmaceutical Waste	120L Bins	Weekly (Tues)
Sharps	19L Bins	Fortnightly (Wed)

Table 2: Waste Quantities and Service Frequency for Clinical Waste Streams

Waste Stream	Assets	Frequency	Provider	Comments
Printer Cartridge/Toner Recycling	HNELHD has partnered with Close the Loop who offer a recycling program for compatible printer cartridges/toners. This is a stewardship scheme and is free of charge. Close The Loop provide detailed reporting that is compliant with C968 contract requirements. Cessnock introduced close the loop cartridge recycling in late 2023.	Ad hoc	Close the Loop	Person who changes the printer cartridge is responsible for dropping off the empty cartridge/toner to central drop off point on the dock.
Batteries	Selected Waste Service Contractor Multiple Times per Week	Not yet in place however will mimic cartridge recycling process	Veolia	Cessnock will have battery recycling in place in mid-2024.
e-Waste	Veolia in the process of finalising e-Waste arrangement with HNELHD.	*Not yet in place however will mimic cartridge and battery recycling process.	Veolia	e-Waste bin (likely 660L bin) housed on the dock. Each department has a small e-Waste collection in the print room. Departmental staff responsible for ensuring that e-Waste is wiped by IT before placing in e-Waste bin. When full, admin request pick up by maintenance. Dock supervisor arranges ad hoc collection by calling Veolia. Cessnock will have battery recycling in place in mid-2024.
Secure Document/Confidential Paper for shredding	3 x 240L Bins		Grace	

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Container Deposit Scheme (Return and Earn)				Recommendation to place CDS bins in public spaces rather than co-mingled recycling to reduce contamination. Option1: CDS bins can be deposited into co-mingled recycling by HealthShare staff as part of regular co- mingled recycling run. Option 2: Partnership with local charity (i.e. Vinnies) or ADE to service CDS bins. Scope to donate all profit or split 50:50.
Metal Recycling (including single use uncontaminated instruments and could also potentially have yearly metal clean-up for large items such as old beds etc.)				Option to partner with local metal recycler. Likely to receive a rebate based on weight and quality of metals. 120L or 240L bins preferred due to weight off items.
Soft Plastics				Currently not in place Veolia unable to offer this waste stream at present. Limited local recyclers able to offer this service at present.
Rigid Medical Plastics				Currently not in place. Veolia can provide a service for this stream however it is cost prohibitive.

Table 3: Waste Quantities and Service Frequency for Bespoke Recycling Streams

Room	Waste Streams	Details
Indoor/Outdoor Public Areas (wait rooms, kitchenettes, cafes)	General Waste Container Deposit Scheme (Return and Earn)	Assuming 240L bins contained in decorative bin cage outdoors. Indoors aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins
Staff Tea Rooms/Kitchens	General Waste Co-Mingled Recycling Food Organics Container Deposit Scheme (Return and Earn)	Aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins Food Organics in Staff Tea Rooms/Kitchen best collected in bench top Kitchen Caddy or inside small bin cupboard
Administration Areas (offices, reception)	Strictly no bins (as per HNELHD Waste Management policy)	Option for staff to utilise a mini desktop bin to collect small bits of waste throughout the day with the view that the staff member decants this into a central bin system on a daily basis.
Staff Stations	Paper/Cardboard Recycling Secure Document Destruction	Aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins

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		*Should not require a general waste bin at staff stations (shouldn't be eating here, gloves and masks should be doffed at handwashing stations).
Print Rooms	Paper/Cardboard Recycling Battery collection e-Waste collection *printer cartridges delivered directly to dock	Aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins
Patient Rooms	General Waste	Aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins
Bathrooms	General Waste	Aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins
Clean Utility Rooms	General Waste Co-Mingled Recycling Soft Plastic Recycling Rigid Medical Plastic Recycling Metal Recycling Sharps Pharmaceutical Waste	Aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins For bespoke streams, you can customise the text on the lid of the multisort bins. 19L 19L
Dirty Utility Rooms	General Waste Clinical Waste Cytotoxic Waste (if required) Sharps	Aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins 64L clinismart equivalent – similar to sharps system 19L
Handwashing Stations	General Waste	Aiming to utilise universal colour coding for bin identification. Source Separation 45L Multisort Bins
Disposal Rooms	General Waste Co-Mingled Recycling Paper/Cardboard Recycling Secure Documents	660L → Swap out for empty 660L → Swap out for empty 660L → Swap out for empty 120 / 240L

Table 4: Waste Quantities and Service Frequency for Internal Bins

Notes:

- General waste bin required wherever there is a sink (to collect gloves, masks and paper towels)
- As per HealthShare WHS, internal bins must be <60L
- As per HealthShare WHS, preference for 660L bins in disposal rooms to:
 - o Reduce manual handling risk (i.e. pushing 660L on 4 wheels is less taxing than pulling 240L on 2 wheels)

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- Reduce frequency of pick up particularly for clean streams such as co-mingled and paper/cardboard recycling
- Staff can swap full 660L bins for empties which reduces touchpoints. Full 660L bins can be serviced directly by waste contractor (rather than adding another step of bin lifting 660L to a big skip/compactor)

The areas allocated within the design for waste management includes 10m² disposal rooms – three on ground level and one on level one, which will act as waste holds for combined general and recycling. A further six dirty utility rooms at 10m² each approx. will be throughout the new hospital holding both general and clinical waste, dirty linen trolleys and wall mounted sharps bins. This equates to a combined 100m² throughout the building.

The internal movements and logistics of the waste flow for Cessnock Hospital is outlined below:

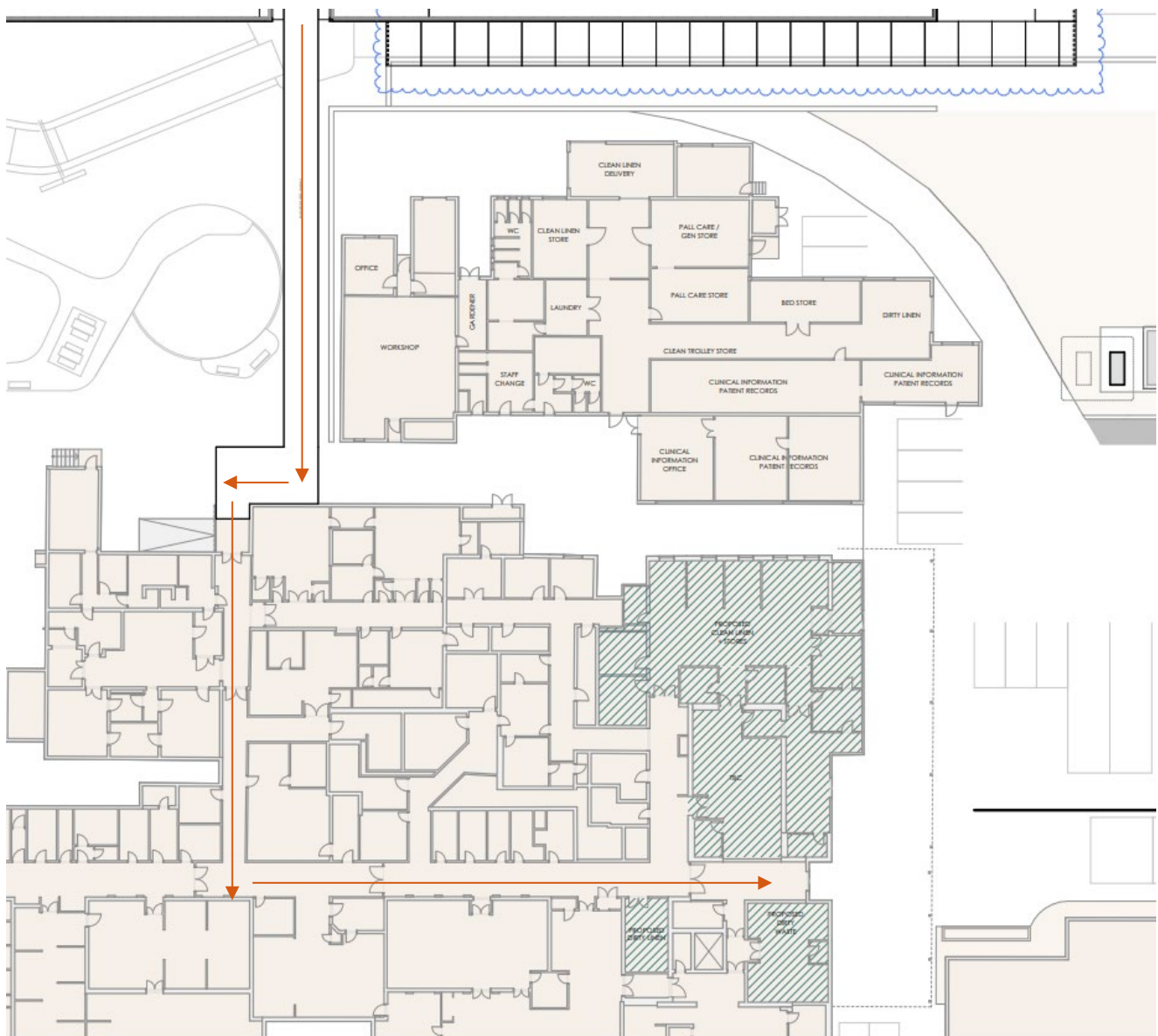


Figure 2: Site Plan – Logistics Workflow and Proposed Central Waste Holding Space

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The flow of waste to the loading dock collection space is as follows:

- Waste generated at the source will be segregated into the waste streams identified in the Plan (**Appendix A – District Waste Management Plan**). This waste will be moved to a central disposal hold within the department (**Figure 3**). This waste will then be transferred to the central waste disposal, proposed to be located in **Figure 2**.
- From there, the waste management contractor will collect the waste for treatment, disposal or recycling.
- The District Waste Management Plan outlines adequate provisions to enable waste stream separation and identifies sufficient waste store areas to accommodate waste requirements.

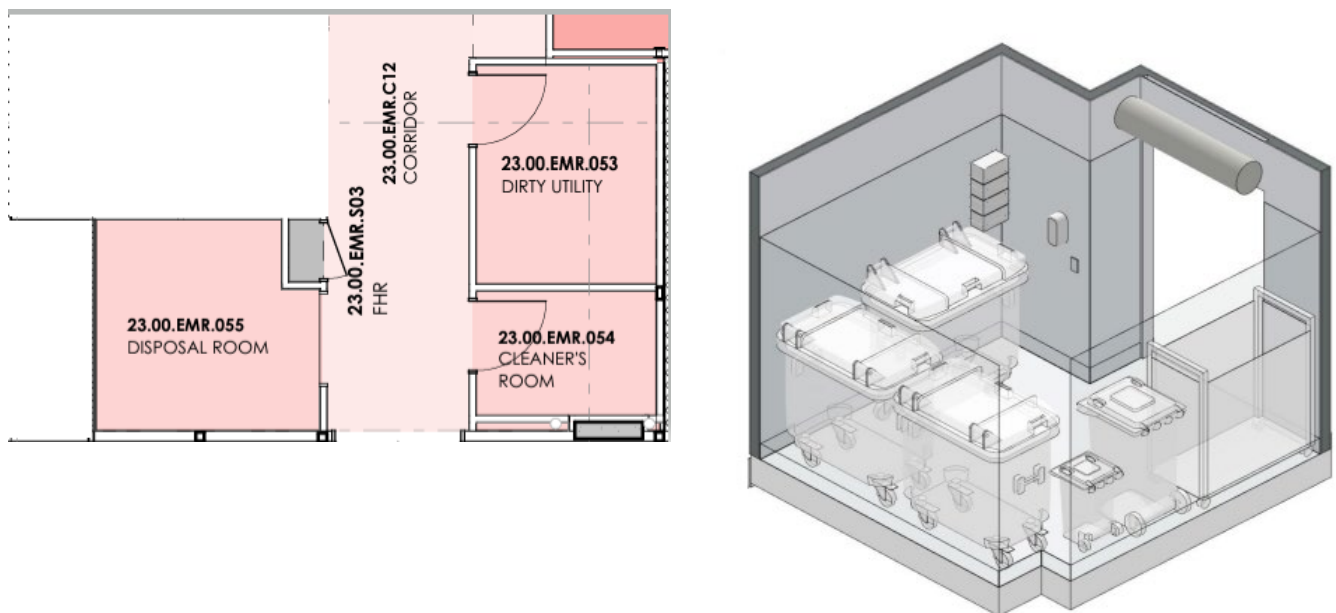


Figure 3: (L) Example of department layout of dirty utility and disposal room, (R) Example layout of disposal room

Appendix A District Waste Management Plan

Policy Compliance Procedure



Health
Hunter New England
Local Health District

District Waste Management Plan

Sites where PCP applies

This PCP applies to:

All Sites

Target audience

All Workers

Description

Describes measure to ensure an adequate waste management system is in place throughout the district.

[Go to Procedure](#)

Keywords

Waste, disposal, recycle, reuse, sustainable

This PCP relates to NSW Ministry of Health Policy Directive and HNE Policy

PD2017_026 Clinical and related Waste Management for Health Services

PCP number

PD2017_026:PCP 2

Replaces existing document?

All site and sector specific waste management plans

Document number and dates of superseded document/s

Related Legislation, Australian Standard, NSW Ministry of Health Policy Directive or Guideline, National Safety and Quality Health Service Standard (NSQHSS) and/or other, HNE Health Document, Professional Guideline, Code of Practice or Ethics:

- See references

Tier 2 Director responsible for Policy to which the PCP relates. PCP authorised by

Kim Nguyen, Executive Director- Workforce & Allied Health

PCP contact person and Network or Service etc. responsible for the PCP

Andrew Folwell, District WHS Manager

Contact details

4985 3200

Date authorised

18 August 2020

Issue date

20 August 2020

Review date

20 August 2023

Note: Over time links in this document may cease working. Where this occurs please source the document in the PPG Directory at: <http://ppg.hne.health.nsw.gov.au/>

PURPOSE AND RISKS

The District Waste Management plan has been developed to provide guidance to workers and management to ensure the risk of harm to people and the environment are identified and appropriately managed in line with legislative requirements.
Risk Category: Safety & Security

GLOSSARY

Acronym or Term	Definition
Hazard	A source or a situation with a potential for harm in terms of human injury or ill health, damage to property, damage to the environment or a combination of these
Hazard Identification	The process of recognising a hazard exists and defining its characteristics
Corrective Action	in relation to a risk to health and safety, means an action taken to eliminate or minimise the risk

PROCEDURE

Compliance with this PCP is mandatory.

The District Waste Management Plan describes the principles, procedures and management of waste generated by Hunter New England Local Health District (HNELHD) and has developed this plan to ensure wastes are reduced, reused and recycled wherever possible and with the aim of:

- Protecting public health and safety
- Provide a safe work environment
- Comply with relevant legislation and policy directives
- Minimise the environmental impact of waste generation and disposal
- Reduce waste handling and disposal costs without compromising the level of healthcare
- Maximise recycling opportunities
- Seek opportunities to reduce energy and greenhouse gas emissions and foster sustainable water use without compromising the level of healthcare

And by implementing:

- Waste minimisation strategies and encouraging the same
- Ensure waste management practices including the segregation, collection, transport, storage and disposal of waste comply with legislation, policy directive and/or relevant standards
- Ensure commitment from all staff and management to actively participate in waste avoidance, reduction, reuse and recycling programs
- Support HNELHD's waste management education program for all staff to increase awareness of Work Health & Safety issues and waste minimisation principles.
- Monitor, review and measuring waste management performance
- Reduction in the costs associated with waste management through correct waste streaming principles

in accordance with the NSW Health [Clinical and Related Waste Management for Health Services PD2017_026](#), [NSW Government Resource Efficiency Policy](#) and in line with the NSW Government Sustainability Policy, NSW Health Waste Management Guidelines, Infection Control Policy, WHS Legislation, Regulation and Codes of Practice.

RESPONSIBILITIES

District Waste Management committee

- Implement the Waste Management Plan throughout the HNE Health
- Have a clear terms of reference
- Include representation from key areas/departments of the HNE Health, Work Health and Safety, HealthShare NSW and shared Person Conducting Business or Undertaking (PCBU)
- Regularly review contractors' reports regarding waste streams management and collection data

General Managers

- Developing and maintaining a safe work environment and safe work practices
- Ensuring hospital activities do not breach waste standards prescribed in the State and Federal legislation
- Provide staff training and education for the safe handling of waste

Health Service Managers/Line Managers

- Provide this document to relevant staff to read and understand
- Monitor compliance of staff to comply with its requirements
- Provide and allocate staff training and education for the safe handling of waste
- Provide staff with the correct equipment for safe handling of waste
- Provide adequate space to permit the use of equipment required for the disposal of waste
- Provide a dedicated hand washing basin for waste handlers
- Provide waste handlers with the PPE appropriate for the risk of the tasks when handling waste.

Workers

- Read and understand this document and comply with its requirements
- Take reasonable care for his/her own health and safety in accordance with the Work Health and Safety Legislation
- Take reasonable care that his/her acts or omissions will not adversely affect the health and safety of other persons
- Read and comply, so far as the worker is reasonably able, with safety instructions and use safe work practices for their own protection and for the protection other staff and the public
- Actively support environmental initiatives introduced for staff safety
- Be aware and comply with the requirements for the handling of chemical substances according to Safety Data Sheets (SDS)
- Ensure waste is handled according to relevant legislation
- Dispose of waste in the correct waste stream
- Handle sharps in accordance with the Infection Prevention and Control Policy
- Follow all Infection Control and Hazardous Manual Tasks Policies
- Perform hand hygiene in accordance with the Infection Prevention and Control Policy
- Wear PPE (Personal Protective Equipment) according to Standard Infection Control Precautions
- Waste must be transported in ridged, leak-proof and covered carts which are cleaned on a regular basis
- Waste must not be transported in a lift at the same time as clients/patients/residents or clean/sterile instruments /supplies/linen.

WASTE STREAM DEFINITIONS

This section gives an overview of the waste streams usually present in health care facilities. The definitions and explanations provided relate to the minimum standards to be applied. All workers must follow waste management policies and procedures at all stages from waste generation to transport.

NSW Health [Clinical and Related Waste Management for Health Services PD2017_026](#) (table 1 & 2) clearly outlines the definition, bin, lid and liner colours, symbol and description, label, specific requirements, relevant act/standard/regulation, EPA licence requirements for each of the following waste types within HNELHD:

- Cytotoxic Waste
- Pharmaceutical Waste
- Anatomical Waste
- Clinical Sharps Waste
- Clinical Waste (inc Pathological waste)
- Radioactive Waste

Clinical Waste

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

- Sharps (any object capable of inflicting a penetrating injury, which may or may not be contaminated with blood and/or body substances. This includes needles and any other sharp objects or instruments designed to perform penetrating procedures)
- Human tissue (excluding hair, teeth and nails);
- Bulk body fluids and blood (free flowing liquids normally contained within a disposable vessel or tubing, not capable of being safely drained to the sewer)
- Visibly blood stained body fluids and visibly blood stained disposable material and equipment;
- Laboratory specimens and cultures

Clinical waste disposal in the community

- In a client's home, clinical waste generated should be disposed of at the point of use
- Sharps are to be disposed of in sharps containers and returned to suitable collection point
- Used aprons, gowns and gloves in both clinical and non-clinical community health settings are classified as general waste
- Any bulk fluids should be emptied into domestic sewerage systems
- Other clinical waste, such as closed system surgical drains, wound exudate collection canisters from vacuum-sealed systems and self-contained chest drainage collection systems that cannot be emptied into domestic sewerage systems, is to be double-bagged and disposed of at point of use.

NOTE: Clinical waste must be treated prior to disposal (usually by autoclaving) however not all clinical waste can be treated in this way.

The NSW Health Guideline for Approval of Method to Treat Clinical Waste states "The Director-General will not approve of the treatment of any of the following types of waste in the clinical waste treatment stream:

- Cytotoxic waste
- Pharmaceutical waste
- Radiological waste
- Body parts (human tissue, limbs, etc)
- Volatile and semi-volatile organic compounds (including formaldehyde, phenol, and mercury) "

These types of clinical waste must be segregated and sent to a facility licensed to process such waste. In accordance with Biohazard Waste Industry Code of Practice recognisable body parts (limbs/organs etc) must be incinerated.

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 and any equipment used that may be contaminated with blood or body substance where cytotoxic preparations have been administered to the associated patient.

Cytotoxic Contaminated Linen

Linen which has been contaminated with any cytotoxic drug and/or contaminated with body fluids/substances (sweat, urine, vomit, blood) of a person receiving cytotoxic drug therapy and up to seven days after administration of the drug.

Pharmaceutical Waste

Consists of pharmaceuticals or other chemical substances specified in the Poisons List under the Poisons and Therapeutic Goods Act 1996. Pharmaceutical substances include expired or discarded pharmaceuticals, filters or other materials contaminated by pharmaceutical products.

Anatomical Waste

All human anatomical wastes and all wastes that are human tissues, organs, or body parts removed by trauma, during surgery, autopsy, birth, research studies, or another hospital procedure, and which are intended for disposal. Anatomical waste must be triple bagged and refrigerated (as soon as practicable) at or below 4°C prior to disposal.

Chemical Waste

Chemical waste is generated from the use of chemicals in medical applications, domestic services, maintenance, laboratories, during sterilisation processes and research. It includes mercury, cyanide, azide, formalin, and glutaraldehyde, which are subject to special disposal requirements. Chemical wastes included in the Dangerous Goods Regulations and Poisons and Therapeutic Goods Act are also included in this stream and should be managed and disposed of as per the Safety Data Sheet (SDS) for the hazardous chemical and recommended handling precautions, PPE and disposal.

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 2013](#).

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.

Recyclable Products

Recyclable products are items that are composed of materials or components, which is capable of being remanufactured or reused. Items are considered recyclable if facilities are available to collect and reprocess them.

Organic Products

Organic products include wood, garden waste, food and vegetable scraps and natural fibrous material, which are biodegradable.

Liquid Waste

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

Lead Gowns

Contact radiation safety officer

General Waste

General waste is any waste not included above, which is not capable of being composted, recycled, reprocessed or re-used. This stream includes incontinence pads, sanitary waste and disposable nappies - that does not come from an infectious patient

WASTE HANDLING, STORAGE, COLLECTION AND TRANSPORT

It is best practice to minimise the handling of waste bags and to avoid decanting from one bin to another. When clinical waste bags must be handled, all bags should be held away from the body by the closed top of the bag, and placed directly into a bin appropriate to the waste.

Gloves, apron and protective eyewear must be worn when closing the bags and placing them into the container. Gloves worn should be appropriate for the type of waste being handled. Workplace hazard identification and risk assessment should be undertaken before purchase to select a range of gloves of suitable material, size, style and fit and consider maintenance and disposal methods.

Waste bags must not be filled to more than two-thirds of their capacity and contents are to be secured within the bag when closing. Excess air should be excluded without compaction, prior to closure at the point of waste generation. The bag is not to be secured or handled with devices which may puncture the bag e.g. staples.

All clinical waste stream bags and receptacles stored, pending collection, should be in a secured area that permits restricted access.

Anatomical waste must be packaged to minimise the risk of the contents spilling or puncturing the bin liner before being placed into the anatomical waste bin. This includes triple bagging of body parts or amputated limbs that may have sharp bone edges and/or the use of wet bags.

Pathology waste and associated materials must be double packaged. When transporting and handling pathology waste, ensure waste is packaged and transported in such a way to ensure the safety of anyone required to handle the package and is maintained under suitable conditions.

In the event of a novel infectious disease, Facilities should refer to specific pathology waste and specimen handling and transporting advice provided by NSW Health or other delegate agencies.

Sharps must never be placed in waste bags.

Managers should contact the manager of HealthShare NSW or the manager of their contracted waste removal service at their facility or site to discuss any issues pertaining to waste management and escalate to the waste management committee as required.

Escalation is required to the General Manager in the absence of the approved contractor's ability to maintain the waste collection service.

Waste Handling and Containment and Storage

Waste bags and containers will be provided in accordance with policies and standards, to provide a safe system of work. Products will be purchased in accordance with NSW Health purchasing policies.

Risk assessments are to be conducted to ensure the necessary and most suitable containers are available at point of use with consideration of risks to staff, patients, visitors and children. Containers need inspecting regularly to ensure they are in good working order.

Staff are to receive training for responsible handling, transport, spill management and disposal of waste and infection control based on their position. My Health Learning Waste Management training code: 39966595 is mandatory to be completed by all staff.

Staff are to be provided with the appropriate PPE for waste handling.

Waste Bags

Ensure waste bags:

- Are not overfilled
- Are held away from the body when being handled
- Are sealed & labelled at the point of generation/collection
- Are free of heavy metals and inorganic dyes
- Are not handled by devices which may puncture the bag
- Waste bags should never be stored directly on the floor.

Sharps

Non re-usable sharps must:

- Be safely managed
- Not be re-sheathed
- Be disposed of in a puncture resistant container immediately at point of use or as soon as practical following use
- Never be forced into a sharps container

Sharps Containers

All sharps containers must:

- Comply with standards
- Remain upright at all times
- Never be overfilled (change container when $\frac{3}{4}$ full or when contents reach the fill line)
- Be securely sealed with a lid before disposal
- Be taken out of service immediately if found to be defective
- Be placed as close as practical to the immediate area where sharps are used: "Point of Use" to limit the distance between the area of use and disposal
- Be placed so visitors cannot easily access them. Containers should not be placed on the floor or lower shelves of trolleys
- Be large enough size to accommodate the type of devices used in the area they are situated

Office Areas and General Waste

General Waste bins are not encouraged within each office or workstation as they are often incorrectly used for paper which should be recycled and cleaning time to empty these bins on a daily basis is very inefficient.

Food is preferably consumed in either the staff cafeteria or local tea rooms, if consumed in office areas the staff concerned are to dispose of the waste in the nearest kitchen general waste bin. This waste management efficiency has already effectively been implemented in several areas of HNELHD and the cleaning resources within HealthShare NSW then utilised in expanded clinical areas of the hospital without increasing labour costs. If staff want to retain the general waste bin in office areas then responsibility to empty these resides with the local staff.

Other containers

Manual handling assessment and assessment of location of certain recyclable containers is required concentrating on items normally placed in general waste to prevent Manual handling risks.

Storage Areas

Waste storage areas are an enclosed structure such as a shed, garage, cage, fenced area or separate loading bay to store waste with the exception of anatomical and clinical waste. Anatomical and clinical waste must have a lockable door and rigid impervious flooring and be refrigerated to prevent decomposition of the waste, unless the waste is removed on a frequent basis.

Storage areas are located away from food and clean storage areas, in an inaccessible area to the public. If it is not practicable to lock the area, all bins and compactors in that area are locked.

Where practicable, loading and unloading should occur within the storage area.

Clean up facilities, spills kits, appropriate drainage and bunding (i.e. retaining walls within the storage area to contain any material that has escaped) will be in place.

Waste Collection and Transport

When $\frac{3}{4}$ full, waste bags or containers are to be sealed by staff at the point of use and placed in designated location for collection eg: dirty utility room or holding area. This area should be a secured area with restricted access.

The waste collectors are to conduct regular collections and may be contacted if extra collections are required. Waste will be transported in designated Mobile Garbage Bins (MGBs) or waste trolleys.

Waste transport routes should avoid food preparation and heavily used areas where possible and must not be transported in lifts at the same time as clients/patients/residents or clean/sterile instruments/ supplies/ linen.

Waste leaving the facilities via an approved contractor must be tracked via the required method back to the facility.

Mobile Garbage Bins (MGBs) and Waste Trolleys

MGBs and waste trolleys are dedicated for waste collecting and transporting only and must not be used for any other transport. MGBs and trolleys must be made of a re-usable rigid walled material, are lidded, lockable and leak proof and must not be overfilled or block vision when being transported. Waste collection rounds will be performed as often as necessary to minimise housekeeping hazards.

MGBs and Waste trolleys used for transporting waste within the hospital will be cleaned at least weekly or as required with a neutral detergent and left to dry. Clean waste trolleys are to be stored separate from soiled containers. Sharps bins, mobile clinical bins, confidential bins and cytotoxic bins are provided and marked with approved symbols and are to be cleaned by approved contractors.

MGBs and waste trolleys are to be inspected at each use. Defective MGBs and waste trolleys must be repaired before use or taken out of service.

Meal tray collection trolleys

Those sites who have My Food Choice implemented use meal collection trolleys which allow for the segregation of waste, food items and recyclables when collecting the meal trays. For those sites without My Food Choice in place segregation of waste occurs in the kitchen.

Transport of Records

A contractor can collect records from the facility for destruction, or they can be delivered to the contractor. A closed truck/vehicle is to be used whenever possible. However, if there is no alternative and the contractor can only provide an open truck, the load is to be secured by a cover. Sensitive and confidential records should only be conveyed in a closed and lockable vehicle.

WASTE DISPOSAL AND DESTRUCTION

Waste is categorised and is required to be disposed of into the correct waste receptacles as per the Categories of Waste, recommended containment and Disposal. See Appendix 1 for details.

NSW Health facilities are responsible for their waste until it is correctly disposed of by approved contractors. All waste leaving the facilities is transported and disposed of by the relevant contractor. Documentation is kept of the date, type and amount of waste disposed by contractors. The facilities receive an invoice from the waste contractors each month detailing quantity, cost. A confirmation certificate of destruction is required to be sent to the site contact by the contractor upon destruction of waste.

Certificates of destruction are to be kept on file to provide evidence of destruction. If waste was to be destroyed and is subsequently found not to be, the certificate is evidence the contractor was at fault, not the facility.

Destruction of Confidential Records

Records should always be disposed of with the same level of security that was maintained during the life of the records. Wherever possible, destruction of records should be supervised by an officer of the organisation or by another authorised agent if destruction has been contracted out.

Extra care should be given to records containing sensitive information. Section 12 of the Privacy and Personal Information Act 1998 states that a public sector agency must dispose of sensitive personal information securely to ensure the information is safeguarded against loss, unauthorised access, use or disclosure.

Lockable 'wheelie' bins may be used for particularly sensitive records. Sensitive records that are not binned should be transported in totally enclosed and lockable vehicles (to prevent records falling off the back of trucks!) and destroyed in the presence of an officer of the facility. Sensitive records may also be shredded 'in-house' before being sent for pulping. Any in-house shredding should still be approved through the normal internal and external approval processes.

Contract 6083 - Secure Destruction Services

Contract 6083 is a period contract for the provision of Secure Destruction Services and is available for the use of Government departments, agencies and authorised users of State Contract Control Board Contracts.

The contract is managed by State Procurement and further details of the contract are available at www.stateprocurement.ogp.commerce.nsw.gov.au

Radioactive Waste Disposal

Not all facilities within HNELHD have radioactive waste.

For those facilities that do the safe handling and disposal of radioactive materials and is removed as contaminated waste following instruction from 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 hospitals Radiation Safety Officer.

Anatomical Waste Disposal

The anatomical waste stream includes any identifiable body part but also includes pathological specimens, biopsy specimens and tissue taken during surgery or autopsy and/or resulting from investigation or treatment of a patient. The following will be disposed via the anatomical waste stream for incineration:

- all recognisable body parts
- large anatomical pathology waste
- placentas

Exceptions to this procedure are:

- Specimens sent to Pathology. Disposal will be the responsibility of the Pathology Service.
- Disposal of Placenta where arrangements have been made using guidelines for the removal and disposal of placental material: [HNELHD CG19_34 Maternity and Gynaecology - Handling of Fetal and](#)

[Placental Tissue passed by Women who Miscarry \(<20 weeks\), PD2016_001 PCP 2 Maternity - Removal of Placenta from Hospital by Parents](#)

Not all facilities within HNELHD have anatomical waste or the anatomical waste disposal services available to them, where this is the case cytotoxic waste bins (purple) are to be utilised as they are sent for incineration.

Disposal of Non-viable Foetuses

Non-viable Foetuses are to be disposed:

- As specimens to pathology
- As per [HNELHD CG19_34 Maternity and Gynaecology - Handling of Fetal and Placental Tissue passed by Women who Miscarry \(<20 weeks\)](#)

Pharmaceutical Disposal

Pharmaceuticals or other chemical substances specified as regulated goods in the Poisons and Therapeutic Goods Act 2008, include any substance specified in a Schedule of the Poisons list under the Act as well as any therapeutic good which is unscheduled. This includes expired or discarded pharmaceuticals, filters or other materials contaminated by pharmaceutical products.

Pharmaceutical waste must be incinerated at a licensed controlled waste facility. Certain pharmaceuticals may only be destroyed by an authorised person under the Poisons and Therapeutic Goods Act 1966. Pharmaceutical waste bins must be lockable. Pharmaceutical waste bins are coloured Red.

Destruction and disposal methods must comply with [PD2013_043 Medical handling in NSW Public Health Facilities](#) and [PD2017_026 - Clinical and Related Waste Management for Health Services](#).

Not all facilities within HNELHD have pharmaceutical waste or the pharmaceutical waste disposal services available to them, where this is the case cytotoxic waste bins (purple) are utilised as they are sent for incineration.

Management of Broken or Obsolete Equipment

Broken or obsolete equipment are to be managed in consultation with the appropriate department responsible ie: Facilities Management Unit, Biomedical and/or IT.

Waste Segregation

Waste segregation is in place to protect personnel from injury and infection by preventing hazardous waste entering inappropriate waste streams. Specific strategies are in place for the segregation of waste and recycling of waste materials is utilised wherever possible.

All waste segregation strategies are not available at all facilities (refer to Appendix 2 for guidance) and facilities may have individual agreements with local government authorities (LGA) for specific types of segregation.

Sharps and Clinical waste is to be inspected annually to accurately determine the level of segregation. This is to be completed by the waste removal contractor. Other categories of waste and recyclable materials can be audited (except hazardous, cytotoxic and radioactive waste).

RECYCLING

Recyclable items are composed of materials or components, capable of being remanufactured or reused. See appendix 2 for items that can be recycled. All items should be rinsed out and caps removed.

Non-Recyclable items include: Broken glass, mirrors, crockery, food containers that still has food in it, plastic bags.

Identified Recycling bins are located throughout the Health facility, especially in areas like offices & staff rooms which are more likely to generate recycling such as paper, cardboard, cans or bottles.

Recycling initiatives throughout the district are:

- Recycling bins for all sites
- Toner cartridges to be sent back for reloading/recycling
- EWaste collection for recycling

WORK HEALTH AND SAFETY

Incidents

All incidents or near misses relating to waste management must be reported directly to the manager/supervisor and documented in IMS+ and in accordance with NSW Health incident reporting and WHS policies and reported to any relevant authorities e.g. Safe Work NSW, EPA and Staff Health and Wellbeing. The following is to occur when a waste management incident occurs;

- All injuries and incidents are investigated by the relevant manager in consultation with HealthShare NSW Supervisor, WHS Coordinator and Infection Control representative as appropriate. Preventive action will be initiated and documented as soon as practical, plus communicated through relevant staff meetings, including WHS Committee or equivalent
- Ensure staff have completed the on-line My Health Learning Waste Management module
- Staff have attend the Emergency Department or Staff Health and Wellbeing Unit following body substance exposures
- NSW Health incident management and investigation and workplace injury management policies will be followed
- Regular summaries of staff blood and body substance exposures are reported by Staff Health and Wellbeing Unit to Infection Prevention and Governance committees
- Body substance exposures are recorded by staff health and wellbeing unit in Epinet for NSW Health mandatory reporting to Safe Work NSW
- Incident/spills impacting on the environment are reported to the EPA (131 555), SafeWork NSW (131 050), Local Government Authority (eg: council) and/or Fire and Rescue (1300 729 579) as required.

Infection Prevention

Cleaning regimes must be in place to regularly clean (at a minimum weekly) and maintain equipment used to contain and transport waste. Contaminated items must be cleaned as soon as possible using appropriate detergents (i.e. neutral detergents), and hospital grade disinfectants approved by the facility.

Staff Health

Staff must use appropriate Personal Protective Equipment (PPE) when required. For tasks involving hazardous chemicals, ensure that the PPE recommended in the Safety Data Sheet (SDS) is provided. Staff must also be trained in the proper selection, fitting (donning/doffing), storage and maintenance of PPE. PPE that must be readily available to staff include:

- Protective eyewear
- Gloves
- Masks
- Impervious aprons and long sleeved impervious gowns

Needle stick injuries or exposures to blood and/or body fluids (or body substances) must be reported immediately and in accordance with NSW Health Policy Directive 2017_010 HIV, Hepatitis B and Hepatitis B – Management of Health Care Workers Potentially Exposed. Information on managing exposures and needle stick injuries can be found in the exposure management resource folder located in the clinic room of all inpatient units and community teams.

All staff must be compliant with NSW Health PD2011_005 Occupational Assessment, Screening and Vaccination against Specified Infection Diseases. Staff Health monitor vaccination compliance monthly.

LICENCING REQUIREMENTS

HNELHD facilities under the Protection of the Environment Operations (General) Regulation 2009 do not require licencing.

All facilities internally, on a daily basis, transport clinical (hazardous) waste to designated storage areas. No facilities are licenced as a treatment facility.

The policy and waste regulations for non-licensed hazardous waste generating or storage activities comply with certain environment protection requirements including: -

- Waste must be stored in an environmentally safe way and must not come into contact with any incompatible waste
- EPA or other body must be provided with information on request, on the generation, storage, treatment or disposal of the hazardous waste, this information must be kept for a period of at least 3 years
- Records must be kept for a period of at least 3 years from the date of transportation:- the quantity and type of waste; the name and licence number of the transporter; the date of transportation; and the name and location of the waste facility that receives the waste

- Waste must be transported by a person who holds a licence under the Waste Act (if the person needs to be licensed), and they must be advised of type of waste transported
- Hazardous waste must be transported only to a controlled waste facility, or to a waste facility that can otherwise lawfully receive the waste; and
- The Health Care Facility must advise the EPA or other approved body about any suspected breach of the Act or Regulation, in relation to the transportation of hazardous waste from the premises.

WASTE MANAGEMENT COMMITTEES

The HNELHD has a District Waste Management Committee, consisting of representatives from:

- Facilities Management Unit
- Infection Prevention Services
- Safety and Risk Unit
- Procurement
- Sustainability
- HealthShare NSW

Where facilities are unable to have their own designated waste management committees, waste management is an agenda item at all site General Staff meetings.

The General Staff meeting shall where necessary:

- Provide recommendations on storage and handling issues
- Review policies and procedures
- Ensure risk assessments are completed
- Ensure SWP (Safe Work Practices) are reviewed and updated
- Table audit results and recommend actions as required

PURCHASING AND PROCUREMENT

HNELHD complies with the NSW Government procurement policies and [NSW Health Goods and Services Procurement Policy PD2019_028](#) and it is recommended each entity develops and implement a [Government Resource Efficiency Policy](#) (GREP Report) annually with the aim to reduce operating costs by driving use of resources, principally in the areas of energy consumption, water consumption and waste management.

WASTE MINIMISATION

To minimise eventual waste, the hierarchy of reduce, re-use and recycle should be taken into account:

- Reduce:** buy less and use less
- Re-Use:** seek opportunities that enable the item, or parts of the item, to be re-used by yourself or others following Infection Prevention and WHS assessment
- Recycle:** the item cannot be re-used but can be separated in to materials that may be incorporated in to new products

General minimisation strategies include:

- Setting printer to default to double sided printing
- Intranet and electronic storage and distribution of documents
- Recycling of paper and other recyclable items
- Battery and e-waste collections
- Toner cartridge collection

SPILL MANAGEMENT

Managers and staff are responsible for ensuring spill risks are identified within their work environment. Managers are then responsible for ensuring appropriate spill kits are available and staff are trained to manage the spills.

Spill kit	Location
General body substance	All areas dealing with clinical waste have access to neutral detergents or other approved cleaning agents, cloths, mops and wet floor signs
Mercury	Maintenance, nuclear medicine
Cytotoxic	All areas dealing with cytotoxic

Aldehyde eg: formaldehyde, glutaraldehyde	Operating theatres, pathology, procedural and storage areas
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Blood and Body Substance Spills

Spot Cleaning

- Put on disposable gloves
- Wipe up spot immediately with a damp cloth, alcohol, or paper towel may be used.
- Discard contaminated materials in Clinical waste bag.
- Wash hands thoroughly.

Other spills

- Collect appropriate spill kit from designated location
- Wear disposable gloves, eyewear, mask and apron
- Remove the bulk of the blood and body substances with absorbent material
- Use tongs to remove any solid waste not absorbed by paper.
- Discard Clinical materials in Clinical waste bag for disposal
- Wash hands thoroughly
- Mop the area with a detergent solution
- Clean tongs, mop and bucket
- Re-usable eyewear and apron should be cleaned and disinfected after use
- Replace any used items and return the spill kit to the designated location

If a spill occurs on a carpeted area, mop up as much of the spill as possible using disposable towels then clean with a neutral detergent. Arrange for the carpet to be shampooed as soon as possible.

Cytotoxic Spills

- Collect cytotoxic spill kit from designated location
- Put out a sign to notify of potential hazard
- Wear appropriate PPE as outlined in SafeWork NSW guidelines.
- Double glove with latex inner and heavy-duty outer gloves
- Lay absorbent towels or mats over the spill
- Scrape up any broken glass and absorbent materials and place in cytotoxic waste bag
- Mop the area with warm water and detergent
- Remove shoe covers, outer gloves, disposable overalls, mask and goggles and place in waste bag/container
- Seal waste bag and place in cytotoxic waste bin or have it collected in the usual manner.
- Replace any used items and return the spill kit to the designated location

Aldehyde Spills

- Shut off all sources of ignition
- Ventilate area as much as possible
- Collect spill kit from designated area

Mercury Spills

- Ventilate area of spill
- Collect mercury spills kit from designated area
- Wear impervious disposable gloves
- Pick up droplets using a Pasteur pipette, eye dropper or suction bottle
- Store the waste in an unbreakable lidded container, preferably under a solution of sodium thiosulphate (photographic fixer).
- Decontaminate the area by sprinkling sulphur powder over the spill area. The volume of powder used should be at least twice the volume of the spill.
- Mix well by a brush, where possible
- Allow about half an hour for the formation of mercuric sulphide
- Sweep up the sulphur using the dustpan and brush, avoid generating dust
- Dispose of the dust in an impervious sealed container
- Seal and discard all cleaning equipment
- Replace any used items and return the spill kit to the designated location
- For spills on carpeted area, follow the first five steps described above. For decontamination, the carpet must be removed. Once the carpet is removed the decontamination procedures can be followed.

Hazardous Substances

Managers are responsible for identifying any spill risks, ensuring spill kits are available and staff are trained to contain and manage spills. If a spill occurs of a flammable liquid:

- Contact NSW Fire and Rescue on 0-000 and state the HAZMAT Team is required
- State building and location of spill and what chemical has been spill
- Cordon off area where spill has occurred
- Contain run off area with bunding
- Allow access to emergency personnel only
- All non-essential personnel must be removed from immediate danger and remain in a safe location until all clear is given by NSW Fire & Rescue
- Notify relevant agencies of spill if required.

EDUCATION AND TRAINING

My Health Learning has an online training package covering the knowledge and application of the core principles for waste management (code: 39966595). This is supported by education provided by Infection Control, Staff health and WHS Coordinator through ongoing education programs. The following topics are to be covered by all staff:

- Safe work practices
- Staff awareness of policies and procedures
- Legislation
- Provision and safe use of PPE
- Infection Prevention procedures(hand hygiene, Infection Prevention and Control Principles for non-clinical staff, sharps injury for non-clinical staff, waste management module, transmission based precautions)
- Waste stream definitions
- Reduce/reuse/recycle
- First aid / needle stick injury
- Spill management
- Hazardous Manual Tasks

Education and training will be supported by waste management promotions through:

- We're Safe Calendar and I'm Safe Activities
- SafetyNews and Email message
- Staff Meetings
- Posters / Brochures and Notice boards
- Waste awareness days

IMPLEMENTATION, MONITORING COMPLIANCE AND AUDIT

This PCP will be provided on PPG Directory and distributed via the CE News and SafetyNews

Compliance of this plan will be monitored for effectiveness via the WHS Audit and Waste Audits (Sharps and Clinical) occur annually at sites. Completed reports are to be sent to the WHS Coordinator for review and record keeping, and non-compliances entered in to IMS+ and followed-up by the relevant manager in a timely manner.

All managers are to be educated on the contents of this policy by inclusion in:

- orientation, induction, education and training sessions

APPENDICES

Appendix 1: Categories of Waste, Recommended Containment and Disposal

Appendix 2: Waste Segregation

REFERENCES











- [Work Health and Safety Policy HNELHD Pol20_01](#)
- [Work Health and Safety: Better Practice Procedures PD2018_013](#)
- [Work Health and Safety Audits PD2016_017](#)
- [WHS Act 2011](#)
- [WHS Regulation 2017](#)

- [Protection of the Environment Operations \(waste\) regulation 2014](#)
- [Clinical and Related Waste Management for Health Services PD2017_026](#)
- [NSW Government Resource Efficiency Policy](#)

FEEDBACK

Any feedback on this document should be sent to the Contact Officer listed on the front page.

Appendix 1 – Categories of Waste, recommended containment and Disposal

 Waste Management Streaming			 Clinical Grossly contaminated infectious waste		 Cytotoxic	
Recycling			Non-Sharps		Non-Sharps	
Paper  <ul style="list-style-type: none"> Newspaper Magazines Paper packaging Non-confidential paper items 	Confidential  <ul style="list-style-type: none"> All papers deemed confidential Non-fileable patient records 	Glass  <ul style="list-style-type: none"> Non-contaminated glass where no recycling available 	 <ul style="list-style-type: none"> Bulk blood & body substance & heavily contaminated waste PPE heavily soiled with blood or body substance Giving sets – do NOT disconnect from IV flask Diarrhoea soiled pads Drains removed from wounds Dressing material heavily soiled with blood or exudate Vomitus & sputum containers Used syringes – including those with interlink cannula attached Pharmaceutical waste when unable to return to Pharmacy Dept 		 Sharps ONLY <ul style="list-style-type: none"> Needles, syringes, lancets Scalpels Giving sets if disconnected from IV flask – cut off sharp point and dispose in Sharps bin Broken drug vials 	
General Recycling  <ul style="list-style-type: none"> Glass bottles Metal/tin cans Plastic bottles Paper Towel Newspapers Magazines 			<ul style="list-style-type: none"> Non-confidential paper items Paper packaging Plastic/foam cups 		 Anatomical waste <ul style="list-style-type: none"> Recognisable body parts, amputated limbs, digits, placenta If Anatomical waste bin not available bag and place into Cytotoxic waste bin 	
General <ul style="list-style-type: none"> Food/food scraps Non-recyclable packaging Paper hand towels Urine testing strips Flowers PPE NOT heavily soiled with blood or body substance PPE after entering isolation rooms Pan covers Urine soaked pads 			<ul style="list-style-type: none"> Faeces soiled pads – NOT diarrhoea Floor sweepings Used urinary catheters and uridomes NOT visibly blood stained Empty urine drainage bags Blue plastic protective sheets Dressings and bandages – NOT heavily soiled with blood or exudate Used dressing packs and packaging Unbroken drug vials 		Pharmaceutical  <ul style="list-style-type: none"> Return to Pharmacy Department (available in some locations) If necessary, dispose as Cytotoxic Waste 	
					Hazardous Material  <ul style="list-style-type: none"> Any material identified as hazardous must be disposed of according to legislative requirements 	

Reviewed: Aug 2020

Appendix 2 – Waste Segregation

Clinical, General and Recyclable Waste

Clinical	Domestic	Recyclable
Bandages & dressings contaminated with blood or body fluid	Food scraps and disposable food containers	Glass
Gloves / PPE soiled with blood or body fluids	Gloves (NOT stained with blood or body fluids)	Paper
Blood stained disposable surgical hardware	Disposable food utensils	Aluminium (cans, foil etc.)
Sharps into a sharp container	Flowers (if not compostable)	Cardboard
Used drainage & suction containers (full/empty)	Disused office supplies	Steel cans
Theatre gowns soiled with blood or body fluids	Personal items	Milk cartons
Bulk blood & body fluids (not capable of safe disposal to the sewer)	Un-used medical supplies	PET (polyethylene Tetrachloride) Plastic bottles
Treated Pathology waste (used culture plates/tubes etc.)	Bed liners (not visibly blood or body fluid stained)	HDPE (High Density Poly-Ethylene) Plastic bottles
Blood or body fluid stained disposable bed liners	Disposable napkins (NOT visibly blood or body fluid stained)	Cooking oils & fats
Blood or body fluid stained disposable napkins/ incontinence pads	Oxygen masks & tubing (clean)	Polypropylene bottles
	Bed pan covers (clean)	
	Sterile wraps	
	Dressing / Treatment trays	
	Paper tissues & hand towel	
	Wrappings	
	Drained IV bags & tubing	