NSW Health Infrastructure

NSW Health Forensic Pathology and Coroners Court

Waste Management Plan

18 July 2016

Partner:

When you think with a global mind problems get smaller

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NSW Health Forensic Pathology and Coroners Court

Prepared for
NSW Health Infrastructure

Prepared by
Coffey Corporate Services Pty Ltd
Level 19, Tower B, 799 Pacific Highway
Chatswood NSW 2067 Australia
t: +61 2 9406 1000 f: +61 2 9406 1002
ABN 55 139 460 521

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1. Introduction

NSW Health Infrastructure (HI) is responsible for the delivery of the proposed NSW Health Forensic Pathology and Coroners Court (FPCC) building at Lidcombe. The proposal is a joint collaboration between NSW Health and the NSW Department of Justice.

The development approval is being conducted as State Significant Development (SSD) in accordance with the *Environmental Planning and Assessment Act 1979* (EP&A Act). An environmental impact statement (EIS) is being prepared to support the SSD application and must meet the requirements of clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

The SSD EIS is being lodged for design and construction of the FPCC and associated works as described in Section 2. The Secretary's Environmental Assessment Requirements (SEARs) to be addressed in the EIS with regards to waste management, include the following:

- Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.

The FPCC waste management plan (this plan) describes how wastes associated with construction and operation of the building will be managed, and has been prepared in response to the SEARs for the EIS being prepared to support the SSD application.

1.1. Objectives

The objectives of this plan are to:

- Identify, quantify and classify the likely waste streams to be generated and the potential impacts of these waste streams during construction and operation of the FPCC.
- Describe the measures to be implemented to manage, reuse, recycle and safely dispose of the waste streams from construction and operation of the FPCC.
- Identify appropriate servicing arrangements for construction and operation waste created on site.

The objectives are consistent with the SEARs requirements for waste management relevant to construction and operation works.

1.2. Scope

This plan provides an assessment of the potential waste impacts of the construction and operation of the FPCC to inform the EIS for construction and operation of the proposal.

This plan will also be used to inform the development of a more detailed waste management plan which will be prepared by the contractor prior to construction commencing and also to update the South Western Sydney Local Health District (WSLHD) Waste Management Policy Manual for operation of the FPCC.

2. Project description

This section discusses elements of the project in order to identify the waste streams from the project.

2.1. Project background

The offices of the NSW State Coroner and Department of Forensic Pathology have been located at 50 Parramatta Road Glebe since 1972. Due to the limited size of the buildings and other issues, the NSW government is spending $100 million to build a new coroner's court and forensic medicine facility in Sydney's west, relocating the Glebe morgue to Lidcombe.

After reviewing eight potential options, the government-owned former Lidcombe Hospital site was selected for the FPCC. The government opened three forensic laboratories on the Lidcombe site two years ago, which use DNA and chemical analysis in a bid to solve crimes. The facility will now be modernised and expanded so the new coroner's court will double in size from two to four courtrooms and have video link so people can testify.

The proposal involves construction of a three level development with a compact footprint located on the corner of Main Avenue and Joseph Street, Lidcombe. The building has a maximum footprint area of around 5,040m^2. It is proposed to include:

FPCC building

The building is to be 48 m wide and 110 m long and will be set back 21 m from Joseph St and 15 m from Main Ave. The proposed FPCC building is likely to be 3 to 4 storeys, with the ground floor positioned at approximately RL 36 m. The uses of the proposed FPCC include:

- Ground floor
  - Identification rooms
  - Waiting rooms
  - Mortuary and laboratories
  - Counselling rooms
  - Media / meeting room and back of house
- First floor
  - Conference rooms
  - Court registry
  - Police advocates offices
  - Shared staff amenity
  - Forensic administration
  - Case management unit
- Second floor
  - Courtrooms
  - Court waiting areas
  - Interview rooms
  - Coroner's Office.

Funeral and police parking

Funeral and police parking is to be located at the southern extent of the building, connected to Weeroona Road through an access road to the south. The funeral and police parking area is likely to be constructed on a fill embankment, with the southern extent approximately 2 m to 2.5 m above the surrounding ground.

Public and staff parking

Public parking is to be located off Main Avenue, occupying an area to the north east of the main building, the car park surfacing is to follow the general slope of the existing ground surface, with some filling likely to control grades. The public parking area is separated from the staff parking area, to the south, by a low retaining wall, potentially between 1 m to 1.5m high.

The staff car parking area is connected to Weeroona Road by construction of the southern access road.

Stormwater infrastructure

The main building stormwater system is to be connected to the existing culvert and network, running below Joseph Street to the west. The location of this connection is currently unknown.

Demolition of medical staff's residential cottages, car parking and access roads do not form part of the EIS as it is understood this is being assessed under Part 5 of *the Environmental Planning and Assessment Act 1979*.

2.2. Project location

The FPCC building is to be located on the north western corner of the NSW Government Precinct, in an area currently occupied by houses and open parkland. The site area is bounded by Main Ave to the north and Joseph St to the west.

The proposed FPCC site is located at 480 Weeroona Road, Lidcombe within the Cumberland Council Local Government Area (LGA).

The site is bounded by Weeroona road to the south, Joseph Street to the west and Main Avenue to the north. NSW Health Forensic and Analytical Science Services and associated facilities buildings are located east of the site.

The site measures approximately 130 m x 100 m and is generally occupied by open grassland scattered vegetation. Three vacant houses occupy the northernmost extent, along Main Avenue. Two asphalt access roads run through the site.

3. Legislative context

Legislation relevant to the management of waste in New South Wales is discussed in the sections below.

3.1. Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) is the key environmental protection legislation for NSW. The Act defines 'waste' for regulatory purposes and establishes licencing and management requirements for waste.

The POEO Act covers environment protection offences and penalties relating to waste. Under the POEO Act, hazardous materials and waste cannot be permitted to leak to land or water, or be dumped on land or in water in a manner that harms or has the potential to harm the environment.

3.2. Protection of the Environment Operations (Waste) Regulation 2014

The Protection of the Environment Operations (Waste) Regulation 2014 (2014 Waste Regulation) sets out the provisions for waste management including tracking of certain types of waste, transportation of waste including asbestos waste, recycling of consumer packaging and classification of waste containing immobilised contaminants, as well as reporting and record keeping requirements for waste facilities.

Under the regulations, the Environment Protection Authority (EPA) has the power to grant exemption from some of these requirements where it can be demonstrated that the waste can be safely used for another purpose. A number of resource recovery orders and exemptions under the regulations are currently in force in NSW. Of relevance to this project are current the exemptions in place for excavated natural material (ENM), excavated public road material, raw mulch, reclaimed asphalt pavement and recovered aggregate.

3.3. Waste Avoidance and Resource Recovery Act 2001

The *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) establishes the waste hierarchy and requires that resource management options are considered against the following priorities:

1. **Avoidance** – actions to reduce the amount of waste generated and undertaking activities.
2. **Resource Recovery** – including reuse, reprocessing, recycling and energy recovery, consistent with the most efficient use of the recovered resources.
3. **Disposal** – an "end-of-pipe" option that must be undertaken carefully to minimise any negative environmental outcomes.

The NSW Government's priority areas and actions for waste avoidance and resource recovery are outlined in the NSW Waste Avoidance and Resource Recovery Strategy 2014 to 2021. The six identified "key target areas" in the strategy are:

1. Avoid and reduce waste generation.
2. Increase recycling.
3. Divert more waste from landfill.
4. Manage problem wastes better.
5. Reduce litter.
6. Reduce illegal dumping.

The strategy also includes the following recycling targets (as relevant to the proposed works at the site):

- Increased recycling of municipal solid waste from 52% (2010 to 2011) to 70%.
- Increased recycling of commercial and industrial waste from 57% (2010 to 2011) to 70%.
- Increased recycling of construction and demolition waste from 75% (2010 to 2011) to 80%.

In summary, the waste management hierarchy (Figure 2) is a nationally and internationally accepted guide for prioritising waste management practices with the objective of achieving optimal environmental outcomes. The hierarchy sets out the preferred order of waste management practices, from most to least preferred and is a key element for guiding waste management practices in Australia. At the same time, the need for flexibility in the approach is recognised, taking into account local and regional economic, social and environmental conditions.

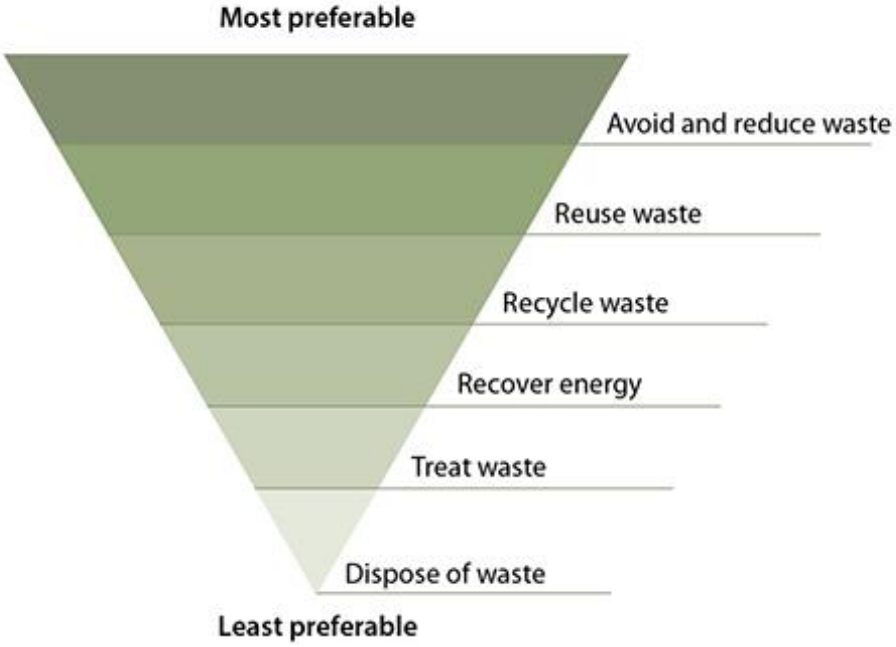

Figure 1 Waste hierarchy (NSW EPA, 2015)

3.4. Contaminated Land Management Act 1997

The *Contaminated Land Management Act 1997* (CLM Act) sets out a process for identifying, remediating and managing contaminated land. This legislation also defines the role of the NSW EPA in the assessment of contamination and the supervision of the investigation and management of contaminated land and sets out accountabilities if the contamination is significant.

The CLM Act seeks to apply the principle of "polluter-pays" by imposing the obligation and cost of remediating contaminated land on the polluter rather than the community.

3.5. Other guidelines and policies

The following guidelines and policies are also relevant to waste management at the site:

- **NSW EPA, 2014 - Waste Classification Guidelines**. The guidelines aim to aid compliance with waste legislation including providing a step-by-step process for waste classification. Waste must be classified by the generators of the waste into one of six different waste classes.

- **NSW WorkCover, 2011 – How to Safely Remove Asbestos Code of Practice**. This code of practice outlines the basic principles which should be followed in the safe removal of asbestos-based materials from all workplaces including structures, plant and equipment.
- **NSW Health – Waste Reduction and Purchasing Policy 2011-2014.** The purpose of this policy is to assist the NSW Health to reach targets for reducing greenhouse gas emissions by reducing waste, and to promote environmentally sustainable purchasing practices.
- **Australian Code for the Transport of Dangerous Goods by Road and Rail** (Australian Dangerous Goods), Edition 7.3 2014. Dangerous good are classified under this Code.

4. Waste management principles

The waste management hierarchy defines the principles of waste management which will be utilised for the construction (Main Building Package) and operation of the FPCC and are discussed in more detail below. These principles will be incorporated into a detailed construction waste management plan to be prepared prior to construction and to update the operational waste management plan.

4.1. Waste avoidance and reduction

The preferred option in the waste hierarchy is to avoid the generation of waste, or reduce the amount or volume of waste that is produced. Waste avoidance and reduction will be facilitated during the construction and operation of the FPCC through:

- Careful project planning to minimise the amount of material brought to site. Waste will be avoided by specifying exact project requirements to be reflected in the purchasing policy. This policy will also consider packaging, and where possible, suppliers will take back packaging and unused materials.
- Good housekeeping practices, including material acquisition and inventory control to avoid waste resulting from materials that are out-of date, off specification, contaminated or excess to project needs.
- Appropriate storage and management of materials on-site to limit the potential for damage from weather or plant and equipment, which in turn will eliminate the need for purchase of replacement products and waste generation.

4.2. Waste reuse/recycling

Reuse and recycling of waste will be encouraged where the generation of waste cannot be avoided. Recycling of wastes will be achieved through implementation of the following measures:

- Evaluating waste production processes and identifying potentially recyclable materials.
- Identifying and recycling of products that can be reintroduced into the construction and operation processes, or related activities at the site.
- Investigating and auditing external markets for recycling by other operations located in the neighbourhood or region of the site (e.g., application to land).

Recycling/reuse will involve separation and segregation of waste to facilitate the waste management program as follows:

- Waste segregation on-site. Where practicable, waste (including fill and natural material) will be separated on site into dedicated bins or areas for either reuse on site or collection by a licensed waste contractor and transport to approved off-site facilities.
- Waste separation off-site. Where space is a limiting factor, wastes will be placed into one bin to be collected by a waste contractor and sorted off site.

The examples below illustrate how materials will be reused or recycled (where possible):

- Natural material will be classified as VENM to allow potential beneficial reuse off-site.
- Asphalt and road base materials from excavation works will be reused either on-site or off-site.
- Concrete from excavation works will be sent to a recycling facility.
- General waste will be separated and segregated from the following recyclable waste:
  - Glass.
  - Paper and cardboard.
  - Aluminium cans.

4.3. Waste handling and storage

Storage and segregation of waste and waste servicing arrangements will be carefully planned as the public will still be accessing the hospital during the works. Planning for waste storage areas will need to consider the changing location of construction areas during the various project phases.

The following measures apply where on-site waste handling and storage is required prior to reuse or recycling and disposal:

- Providing clear signage to mark the location and storage of different types of waste.
- Considering the following measures in relation to stockpile management:
  - Locate stockpiles within designated areas within the site compound, only and away from drainage lines.
  - Locate on hardstand surfaces or, where this is not possible, on plastic sheeting.
  - Position stockpiles up-slope of sediment control barriers.
  - Limit stockpile height to 2 m.
  - Cover the stockpiles or stabilise the surface with a suitable material to prevent erosion and sediment loss.
  - Stockpile different geological units separately to allow for easier classification and removal off-site.
- Stockpiling/storage of concrete, bricks, scrap metal and miscellaneous materials separately.
- Storing wastes in containers that are in good condition and compatible with the waste.
- Keeping waste containers closed unless waste is being added to or removed from the container.
- Storing liquid wastes in appropriate containers in bunded areas until transported off site. Bunded areas will have the capacity to hold 110% of the volume of the liquid waste for bulk storage or 120% of the volume of the largest container for smaller packaged storage.
- Protecting containers holding waste from the weather (e.g., rain and wind) to help maintain the integrity of the container and reduce the potential for a spill. Such protection could include storage buildings, roofed areas, tarps, and plastic drum covers to keep water off the tops of the drums.
- Labeling containers storing wastes that provides information to facilitate the safe and proper management of the waste, including:
  - Name of the waste stream.
  - Composition and physical state (e.g., solid, liquid, sludge) of the waste.
  - Restricted properties of the waste (e.g., "corrosive", “ignitable”).
  - Name of the activity, process, and/or location that generated the waste.
  - Date the first waste entered the container.
- Considering the safety of site users for all servicing arrangements (including mobile plant and equipment) for the transport of waste from the site.

4.4. Waste tracking and disposal

Wastes generated by the project that cannot be either recycled or reused on-site will be disposed of by a licensed waste contractor to an appropriately licenced landfill or recycling facility. All vehicles conveying waste soils will have covered loads when leaving site.

Prior to disposal, waste will be classified in accordance with the requirements of the NSW EPA Waste Classification Guidelines.

A waste inventory will be maintained.

A tracking system will be used to track waste quantities and types disposed. Documentation will track wastes, including the handling steps and servicing arrangements followed to manage the wastes from the point (area) of generation through to collection, storage, treatment, and final disposal.

On- and off-site waste tracking shall record, for each waste generated and managed, the following:

- Waste generator facility name and address.
- Type and identity of transport vehicles associated with the collection and final disposal of waste.
- Date for recycling, treatment, or disposal.
- Type of waste.
- Quantity of waste.
- Method of recycle, treatment, or disposal.
- Description of waste, including restricted characteristics (i.e., what makes it a restricted or non-restricted waste).

Waste tracking forms will be used for all wastes moved off-site. The tracking form will record appropriate information about each waste stream and enable control of the waste disposition by confirming receipt by the designated recipient.

5. Potential impacts and management

5.1. Waste-related impacts

Potential impacts associated with poor or inadequate management of wastes generated during the construction and operation of the FPCC are described in Table 5.1.

Table 5.1 Aspects of waste management and potential impacts

Aspect of waste management	Potential impacts
Generation of waste (usage of resources)	• Extraction of resources. • Energy and water consumption associated with processing.
On-site storage of waste in an urban setting	• Increased dust. • Visual impact. • Increased littering. • Sediment laden runoff. • Odours. • Increased pest animals. • Restricted space/site access. • Health and safety of site users and workers.
On-site storage and segregation of waste	• Reduction in reuse of materials. • Cross-contamination of waste. • Contamination of recycling centres.
On-site storage of liquid and/or contaminated waste	• Contamination of surface soils, groundwater, and surface waters. • Odours.
Hazardous materials such as clinical waste	• Risk to human health.
Waste transportation	• Noise and dust impacts to surrounding sensitive receptors. • Odours. • Mud tracking on roads during construction.
Non-classified or incorrectly classified waste disposal/transport	• Regulatory non-compliance and associated penalties. • Contamination of landfill/recycling centres.
Unlicensed waste transporters removing waste off-site	• Regulatory non-compliance and associated penalties. • Illegal dumping of waste.

5.2. Summary of contamination assessment findings

A Stage 2 contamination assessment and geotechnical assessment (Coffey Geotechnical, 2016) was conducted to obtain contamination and geotechnical data to support the proposed development of the site. The Stage 2 contamination assessment was prepared in general accordance with industry and NSW EPA guidelines, particularly the Guidelines for Consultants Reporting on Contaminated Sites (NSW OEH, 2011) and relevant sections of the National Environment Protection (Assessment of Site Contamination) Measure 1999 (the ASC NEPM) (NEPC 1999, amended 2013).

Results from the Stage 2 contamination investigation indicated that:

- All samples collected during this investigation returned results below human and environmental assessment criteria for commercial/industrial land use. Sampling and analysis of the parts of the site with minimal potential for impact from previous use was sufficient to provide a representative assessment which was supplemented by judgemental sampling and analysis in areas where potential for impact was suspected.
- Asbestos was not detected in soil samples collected from around the cottages though asbestos containing material (one fibro fragment) was observed on the ground surface.
- Fill soils classify as general solid waste (GSW) under the six step procedure documented within NSW EPA (2014) Waste Classification Guidelines, Part 1: Classifying Waste. A waste classification of GSW allows these soils to be reused onsite (subsequent to geotechnical classification) or exported offsite as GSW.

According to the investigation undertaken by Coffey Geotechnical (2016), bedrock and natural soils met the classification of virgin excavated natural material (VENM) and could be disposed of as VENM to an appropriately licenced facility, or reused onsite. The information provided in the report by Coffey Geotechnical could also be used to assess whether the material is suitable for beneficial reuse at another site as fill material.

VENM is defined in the *Protection of Environment Operations Act 1997* (POEO Act) as:

- Excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities.
- Does not contain any sulfidic ores or soils or any other waste.

Waste management methods to ensure construction spoil waste is controlled are provided in Section 5.3.1.

5.3. Waste management methods

The estimated volumes of waste to be generated during construction and operation of the FPCC are described below. Management and disposal methods are also detailed for each waste type.

5.3.1. Construction

The waste streams likely to be generated during construction of the FPCC are detailed in Table 5.2. The waste volumes for the duration of construction have been estimated and will be updated upon engagement of a contractor. The proposed methods for handling, storage and reuse/disposal of each waste type are also presented.

Table 5.2 Waste streams, estimated volumes and management during construction

Activity	Waste stream	Estimated Volume[1]	Management and destination
Site excavation and earthworks	Removal of the observed fibro fragment and any other fibro fragments that may be present or may result from demolition of buildings on the site.	Fragments	• Engage an asbestos removal contractor (such as the demolition contractor) to conduct a systematic inspection of the area for collection of any fibro fragments. • These fragments can be stored in a strong plastic bag (labelled as 'Asbestos Waste') and disposed with other ACM removed from the cottages as part of demolition.
Site excavation and earthworks	Unexpected materials / contamination	N/A	• Implement an unexpected materials management protocol that is focussed on fibro/asbestos fragments and other potential contamination sources during earthworks.
	Surplus excavated surface soil	To be determined	• Can be disposed as GSW at a suitably licenced facility or reused onsite as construction fill provided that no asbestos impacts in that soil are discovered during earthworks. • Analytical results for fill soil, in areas other than immediately surrounding the eastern two cottages, reported concentrations of contaminants below the CT1 waste thresholds. • This finding indicates that the majority of fill soil may be disposed off-site to a licensed soil recycling facility.
Construction of new building	Structural steel	<20 m^3	• Segregation on site. • Transport or collection to a recycling facility.
	Steel reinforcement	<20 m^3	• Segregation on site. • Transport or collection to a recycling facility.

Activity	Waste stream	Estimated Volume[1]	Management and destination
	Concrete	<20 m^3	• Segregation on-site. • Transport to a recycler or use on-site/off-site in road making activities, building, landscaping and construction works in accordance with the requirements of the Recovered Aggregate Resource Recovery Exemption 2014. • Where reuse is not practical, concrete has been pre-classified by the EPA as General Solid Waste (non-putrescible) and can be disposed to an appropriately licensed facility by a licensed contractor.
	Plasterboard	1,000m^2	• Landfill
	Paints	1,500m^2	• Drop-off location for chemicals and paints at Hi Quality Group, 1503 Elizabeth Drive, Kemps Creek.
	Metals	100m^2	• Segregation on-site. • Transport or collection to a recycling facility.
	Asphalt (for roads and car parks)	<2 m^3	• Landfill
	Mechanical - ductwork	<2 m^3	• Segregation on-site. • Transport or collection to a recycling facility.
	Electrical - metal cable trays, electrical cables, fibre optic cables	<2 m^3	• Segregation on site. • Transport or collection to a recycling facility.
	Hydraulics - UPVC Pipe, Copper pipe, HDPE pipe	<2 m^3	• Segregation on site. • Transport or collection to a recycling facility.
Site office and worksites	General office waste (e.g., paper, printer cartridges)	<2 m^3	• Segregation of recyclable wastes and storage on-site. • Collection and transport to a recycler.
	Domestic wastes (e.g., food scraps, glass bottles, cans, packaging)	<2 m^3	• Segregation of recyclable wastes and storage on-site. • Collection and transport to a recycling facility. • Transport and disposal of non-recyclable wastes to an appropriately licensed facility (classified as general solid waste).
	Septic and sanitary systems waste	Unknown	• Sewage treatment plant

Activity	Waste stream	Estimated Volume[1]	Management and destination
Plant maintenance and chemicals management	Drums and containers	<2 m^3	• Segregation of recyclable wastes and storage on-site. • Collection and transport to a recycling facility.
	Chemical wastes	<2 m^3	• Drop off location for chemicals and paints at Hi Quality Group, 1503 Elizabeth Drive, Kemps Creek.
	Waste oil, grease, lubricants, oily rags and filters	<2 m^3	• Segregation of recyclable wastes and storage on-site. • Collection and transport to a recycling facility.

[1]The quantities are estimates only and will be revised by the construction contractor and waste management will be updated in response to the revised quantities.

A detailed construction waste management plan will be developed by the Contractor as part of the Construction Environmental Management Plan for the FPCC. The plan will provide further details of the management requirements for the waste types in Table 6.1 noting that the list is not exhaustive and the types and quantities of waste may be revised as the project proceeds.

The *NSW Waste and Resource Recovery Strategy 2014 – 21* (NSW EPA 2014) has set a target for increasing recycling of construction and demolition waste to 80% by 2021. The Contractor should aim for 80% of waste generated in construction to be either reused or recycled. Records of waste reused or recycled should be kept to enable measurement of this target during construction.

5.3.2. Operation

The waste streams likely to be generated during operation of the FPCC are detailed in Table 5.3. Confirmation of classification and quantities of potential waste streams will be conducted prior to the opening of the FPCC, to ensure proper management and disposal methods are in place relevant to each waste type.

No waste streams will be generated that are not already produced by the Glebe Coroners Court. An estimate of the waste volumes that are likely to be produced by the FPCC, is provided in Table 5.3. These quantities will be revised prior to operation commencing.

Table 5.3 Waste streams, estimated volumes and management during operation

Waste stream	Estimated Volume (kg / month)[1]	Management and destination
Clinical waste	900 To be confirmed	• Segregate and dispose at point of generation in yellow lockable mobile garbage (wheelie) bins appropriately placed in all clinical areas. • Decontaminate and bury as Special Waste.
Sharps waste		• Dispose of in approved yellow sharp container that meets AS/NZS 4261:1994 or AS/NZS 4031:1992 depending on whether reusable or disposal system. Only fill to the marked line. • Seal full disposal sharp containers in accordance with manufacturer's guidelines and place in the appropriate designated storage area. • Transport to a lockable area for collection.
Anatomical waste		• Dispose of in a yellow bag, placed in the burgundy wheelie bin. • Transport bin to a secure waste storage area.

Waste stream	Estimated Volume (kg / month)[1]	Management and destination
		• Disposal process is by incineration.
Recyclable products	1,000	• Segregate and dispose of in appropriate coloured wheelie bins. • Transport to materials recovery facilities.
Organic products	300	• Place food waste that is not pulped and is biodegradable in the blue mobile garbage (wheelie) bin. • Dispose of other kitchen waste in the general waste bins.
Liquid waste (non clinical or hazardous)	Data not provided.	• Grease traps procedures should be in place to ensure maintenance in accordance with Sydney Water's standards.
Hazardous substances and dangerous goods (includes formalin)	Data not provided.	• After disposal of the specimen, formalin will be disposed within the container and this is then incinerated off site. • Use a licensed transporter to transport waste classified as Group A, Group B and Group C when amounts exceed 200 kg or 200 L. Hazardous waste Group A must be tracked. • Dangerous goods must be transported by licensed transporters.
General waste	1,000	• Placed in semi-opaque white bags or colour coded mobile garbage (wheelie) bins or other non-mobile bins provided in work area. • Transport full waste bags to the nearest mobile garbage (wheelie) bin and store in bins or compact at waste holding area. • Collect bins/compactors on a scheduled basis or as required (by a Sydney West Area Health Service appointed waste contractor) and transport to a licensed waste transfer station for landfill.

[1]The quantities are estimates only and will be revised by the FPCC prior to operation and waste management will be updated in response to the revised quantities.

Measures to manage, reuse, recycle, transport and safely dispose of waste generated at the FPCC will be implemented in accordance with this WMP, the Sydney South West Area Health Service's Waste Management Policy Manual. A detailed waste management plan will be prepared prior to the FPCC coming into operation incorporating all of these requirements.

As part of the EIS, a Preliminary Hazard Assessment (PHA) has also been prepared which provides details of the proposed storage, use and management of hazardous materials at the FPCC and measures to be implemented to manage hazards and risks associated with storage.

6. Roles and responsibilities

The FPCC construction contractor will be responsible for implementing this plan during construction, through the development of a detailed waste management plan prior to commencement of the construction works. That plan must be consistent with the approach, principles and management methods outlined in this plan.

The FPCC construction contractor will also be responsible for:

- Inducting all contractors and visitors about the relevant aspects of this plan.
- Ensuring all waste management contractors have the necessary qualifications and licenses to remove waste from the site.
- Carrying out periodic audits to check compliance with the waste management plan.

The FPCC will be responsible for implementing the operational waste management measures contained in this plan following completion and handover of the FPCC including:

- Ensuring that an up-to-date operational waste management plan is in place, is reviewed regularly and is compliant with relevant legislation, Sydney South West Area Health Service's Waste Management Policy Manual.
- Establishing safe waste management practices are in place in accordance with the plan in all areas.
- Providing appropriate inductions, site orientations, training and/or information for employees, volunteers, contractors and visitors (as appropriate) regarding waste management procedures at the FPCC.
- Setting waste management objectives annually and conducting regular audits as required.
- Ensuring all waste management contractors have the necessary qualifications and licenses to remove waste from the FPCC.

7. Training and inductions

During construction, all site personnel and subcontractors will be inducted into the requirements of this plan to in accordance to their level of responsibility. As such, the induction is expected to include the following components:

- The waste hierarchy and associated waste management principles (avoid, reuse, recycle).
- NSW EPA Waste Classification Guidelines.
- Procedures for handling and storage of wastes.
- Location of waste disposal and storage facilities.
- Actions to be undertaken in the event of a hazardous material spill.

Once the FPCC is operating, all staff, volunteers and contractors will, as part of their induction, be briefed on the following aspects of waste management:

- The waste hierarchy and associated waste management principles (avoid, reuse, recycle).
- Location of waste disposal and storage facilities.
- Actions to be undertaken in the event of a hazardous material spill.

Staff and contractors with specific responsibilities for waste management including for the handling and disposal of clinical and hazardous waste will be given additional training as required.

8. Evaluation and reporting

Regular audits of waste management practices should be conducted and should include a review of the following:

- Staff knowledge of waste management requirements.
- Number, size, labelling and condition of waste receptacles.
- Segregation of wastes.
- Handling and storage arrangements for waste.
- Waste recording and tracking procedures (including types and volumes for reuse/recycling or disposal).
- Qualifications and licenses of waste contractors used to remove waste from the FPCC.

The findings of these audits should be used to identify any required changes to waste management practices and methods.

The WMP should be reviewed on a regular basis, particularly when there are any changes to work activities that affect waste generation, following any waste-related incidents, and/or where opportunities for improvement are identified.

9. References

Coffey Geotechnics Pty Ltd, 2016. Forensic Pathology & Coroners Court 480 Weeroona Road, Lidcombe Geotechnical Investigation Report. 28 April 2016.

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