Sydney Port Botany Terminal 3 Project
Waste Management Plan

Terms and Definitions

The following terms, abbreviations and definitions are used in this plan:

Terms	Explanation
SPBT3	Sydney Port Botany Terminal 3
CEMP	Construction Environmental Management Plan
EM	Environmental Manager
EPA	Environmental Protection Agency
ERAP	Environmental Risk Action Plan
OEH	Department of Climate Change and Water
CWMP	Construction Waste Management Plan
EIS	Environmental Impact Statement
MCoA	Ministers Conditions of Approval

Distribution

The master 'controlled' CWMP document forms part of the project's CEMP as an Appendix. The controlled copy will be retained in TeamBinder, the Laing O'Rourke document management system, where it can be accessed by personnel as necessary.

All paper copies of this CWMP will be considered as 'uncontrolled' unless they have been allocated a 'copy number' in a colour other than black.

The client representative will be provided with a copy in conjunction with the submission of the CEMP.

Issue, Revision and Re-issue

The initial issue of this CWMP has been reviewed by Laing O'Rourke's Regional Environmental Manager to ensure it meets the requirements of the current EMS and policy, contract, specifications and standards. The plan is approved for use on the project by the Project Director. Evidence of initial review and approval is by signatures on the cover sheet.

In conjunction with the submission of the CWMP, Laing O'Rourke will coordinate and facilitate an initial CWMP Workshop with representatives from the client and Laing O'Rourke to discuss the contents and application of the CWMP to facilitate the approval of the CWMP and agree the proposed management measures and controls.

Revisions of this CWMP may be required throughout the duration of the project to reflect changing circumstances or identified opportunities for improvement.

Revisions may result from:

- Management Review
- Changes to the Company's standard system
- Audit (either internal or by external parties)
- Client complaints or non-conformance reports.

Revisions shall be reviewed and approved by the Project Manager prior to issue. Updates to this CWMP are numbered consecutively and transmitted to holders of controlled copies.

Contents

1. Introduction

This Construction Waste Management Plan (CWMP) has been developed to address the construction activities associated with the Sydney Port Botany Terminal 3 (SPBT3) Project. In particular, the plan has been developed to address the requirement for a Waste Management Plan as outlined in the conditions of approval.

Development of Sydney Port Botany Terminal 3 will involve the construction of onshore civil infrastructure including container stacking areas. The proposed Terminals have four berths with a total length of 1,180 m. The approximate Terminal area, excluding the Wharf area is 46 ha.

The key components of the Sydney Port Botany Terminal 3 include:

- Ground treatment and consolidation measures
- Drainage, utilities, services
- Container yard
- HV & LV electrical
- Buildings
- Rail yard.

1.1 Objective

The objective of this CWMP is to ensure that all risks associated with construction waste management are considered and managed effectively during construction to avoid any environmental incident.

This CWMP seeks to ensure that construction waste is managed effectively to prevent any negative environmental impact on Botany Bay and associated ecosystems and also receiving resource recovery and waste facilities. Appropriately trained personnel and experience gained from previous projects will be used to achieve high environmental performance on the SPBT3 Project.

It is recognised that during construction some specific areas will require alterations to the planned control measures due to changing circumstances. In these situations, the planned control measures will be reviewed, risk assessed and, where appropriate and practical, amended as necessary prior to commencing new or modified activities. These alterations are expected to primarily involve erosion and sediment control issues and will be documented as updated erosion and sediment control plans for different stages of the construction works.

This CWMP aims to satisfy the following objectives:

- Address the requirements of the planning approval for the SPBT3 Project
- Address the requirements of the Environmental Impact Statement (EIS) for the Port Botany expansion
- Address the requirements outlined in the Aurecon Framework Construction Environmental Management Plan
- Address the requirements of the relevant environmental legislation as it applies to this project
- Address the requirements of the Environment Protection Licence issued for the works undertaken for the SPBT3 Project
- Summarise potential impacts on the environment from the proposed works
- Document environmental procedures to control potential environmental impacts.

Responsibilities for the implementation and management of this CWMP are in accordance with the Project's Construction Environmental Management Plan.

1.2 Commitment

It is the commitment of Laing O'Rourke to implement all measures discussed in this CWMP and to meet all relevant criteria to ensure the health of Botany Bay and its surrounds is maintained and that a safe worksite is upheld. Laing O'Rourke is committed to the sustainable development of the Port Botany Expansion and in doing so will ensure waste segregation, resource recovery and appropriate disposal of construction wastes are undertaken and incorporating a sustainability focus to the work force.

1.3 Targets

The following targets have been identified in terms of soil and water management for the project:

- Waste products reused on site where possible
- Separation for recycling of 100% of recyclable materials such as steel, aluminium, paper and plastics from the site office areas
- Capture and recycling of 75% scrap steel from any demolition and construction activities
- All residual waste products are sent to appropriately licensed destinations for either recycling, reuse, treatment or disposal
- No contamination incident occurring as a result of waste storage, transport or disposal
- No rejection of loads by the receiving facility for non-compliant wastes
- Regulated wastes stored, transported, tracked and disposed of as per regulated waste legislation
- No construction waste/litter to enter into stormwater system and or Botany Bay.
- Documentation of the intended management of wastes e.g. avoid, reduce, reuse, recycle or dispose to ensure waste is managed in accordance with accepted standards and appropriately implemented waste control measures
- Implementation of waste minimization initiatives
- Minimisation of energy consumption through implementation of energy efficient work practices.
- The following targets relating to waste management as outlined in the Sustainability Action Plan:
    - Meet the waste hierarchy of avoid, reuse, recycle and dispose.
    - Reduce waste to landfill by at least 90% by mass
    - Continually update and improve waste management on the project
    - Ensure disposal complies with requirements of the OEH and local authorities.
    - Ensure resource recovery is undertaken efficiently
    - Ensure recycling is undertaken efficiently.

1.4 Statutory provisions and guidelines

The following statutory provisions and guidelines are applicable to the Project, with regards to water quality:

- Project Planning Approval and associated MCoA's

- Waste Avoidance and Resource Recovery Act 2001
- EPA Act Part 15
- Protection of the Environment Operations Act 1997
- EPA's Environmental Guidelines: Assessment, Classification & Management of Liquid & Non-Liquid Wastes (1999)
- Botany Bay DCP 29 and the National Minimisation and Recycling Strategy
- DEC'S Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes.

1.5 Ministers Conditions of Approval

MCoA's relevant to soil and water quality management are outlined below.

MCoA Reference	MCoA Detail
B2.33	Prior to the commencement of construction, the Applicant is required to prepare a Construction Waste Management Plan in consultation with Botany Council and DECC. The Plan must provide details of proposed waste management measures to minimise production and impact of wastes generated at the site including but not limited to: • Identification of the type and quantities of waste that would be generated, a description of how the waste would be handled, stored, re-used, recycled, and if necessary, appropriately treated; • Identification of a designated area for the storage and collection of waste and recyclable materials to be provided on the site; • Description of how the effectiveness of these measures would be monitored and, if non-compliance detected, actions to be required; and • Measures to involve and encourage employees and contractors to minimise domestic waste production on site and to reuse/recycle where possible.
B2.34	Management of waste must be in accordance with the environment protection licence issued by EPA under the Protection of the Environment Operations Act 1997.
B2.35	All wastes and material generated on the site during construction and operation shall be classified in accordance with the DEC's Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes prior to transporting the waste off site and be disposed of to a facility that may lawfully accept the waste.
B2.36	Except as expressly permitted by a licence issued by the EPA under the Protection of the Environment Operations Act 1997, only the hazardous and/or industrial and/or Group A waste listed below may be generated and/or stored at the premises: waste oil/water, hydrocarbons/water mixtures or emulsions; and grease trap waste

2. References

- Port Botany Expansion Environmental Impact Statement
- Aurecon Framework Construction Environmental Management Plan Sydney Terminal 3 Sydney International Container Terminals Pty Limited, Revision 3
- Waste Classification Guidelines DECC April 2008
- NSW Government's Waste Reduction and Purchasing Policy (WRAPP)
- Botany Bay Development Control Plan 29 – Waste Minimisation and Management Guidelines
- Reference is also made to the NSW Protection of the Environment Operations Act which integrates into one Act all of the controls necessary to regulate pollution and reduce

degradation of the environment. The Act also provides for licensing of scheduled development work, scheduled activities and for offences and prosecution under this Act.

3. Legislation

Waste legislation and regulatory framework is outlined below.

3.1 Waste Avoidance and Resource Recovery Act 2001

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

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

The NSW Government's priority areas and actions for waste avoidance and resource recovery is outlined in the Waste Strategy 2007 (an update of the Waste Strategy 2003).

The four identified "key target areas" in the Strategy are:

- Preventing and avoiding waste
- Increasing recovery and use of secondary materials
- Reducing toxicity in products and materials
- Reducing litter and illegal dumping.

3.2 Protection of the Environment Operations Act 1997

All material that is imported to or exported from the SPBT3 project will be undertaken in strict accordance with the requirements of the POEO Act 1997 including:

- Ensuring waste is classified appropriately and in accordance with relevant guidelines
- Waste materials are disposed of to appropriately licensed facilities
- Other materials are removed to facilities lawfully able to accept such materials.

3.3 Protection of the Environment Operations (Waste) Regulation 2005

The proposed works shall be undertaken in accordance with this regulation, as modified in April 2008.

3.4 Waste Classification Guidelines, Part 1: Classifying Waste (DECC 2008)

All wastes generated and proposed to be disposed off-site shall be assessed, classified and managed in accordance with this guideline.

3.5 Asbestos Regulations

Asbestos containing materials shall be undertaken in accordance with the requirements of the:

- Occupational Health and Safety Act 2000
- Occupational Health and Safety Regulation 2001
- Code of Practice for the Safe Removal of Asbestos, 2nd Edition (NOHSC 2005)
- Guideline: Your Guide to Working With Asbestos (WorkCover 2008)

- Waste Classification Guidelines: Part 1: Classifying Waste (DECC 2008).

Refer to the Hazardous Materials and Asbestos Management Plan for procedures in dealing with asbestos on site.

3.6 NSW Waste Reduction and Purchasing Policy (WRAPP)

The NSW Waste Reduction and Purchasing Policy (WRAPP) commenced in September 1997.

The policy requires all state government agencies to develop and implement a WRAPP Plan to reduce waste and increase the purchase of recycled content materials in four areas:

- paper products
- office consumables (eg. toner cartridges)
- vegetation and landscaping material
- construction and demolition material.

As a state owned agency Sydney Ports requires waste reporting in line with NSW Waste Reduction and Purchasing Policy (WRAPP). The project will input all required information to fulfil these requirements throughout construction.

4. Strategic Approach

4.1 Waste Classification

Waste is generally classified on the basis of its potential harm to the environment. A summary of the classification requirements for the SPBT3 project is provided below. Further details on the classification of waste can be found in the OEH's Waste Classification Guidelines.

Waste is defined in the Protection of the Environment Operations Act 1997 as:

- Any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or
- Any discarded, rejected, unwanted, surplus or abandoned substance, or
- Any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, processing, recovery or purification by a separate operation from that which produced the substance, or
- Any processed, recycled, re-used or recovered substance produced wholly or partly from waste that is applied to land, or used as fuel, but only in the circumstances prescribed by the regulations, or
- Any substance prescribed by the regulations to be waste.

Note: A substance is not precluded from being waste for the purposes of this Act merely because it is or may be processed, recycled, re-used or recovered.

Waste Classification	Description
Special Waste	Special waste includes clinical and related waste, asbestos waste and waste tyres. Clinical and Related Waste includes: • Clinical Waste • Cytotoxic Waste • Pharmaceutical, drug or medicine waste • Sharps wastes

Waste Classification	Description
	• Asbestos waste means any material or material that contains the fibrous form of mineral silicates. • Waste Tyres is any used, rejected or unwanted tyres including shredded or tyre pieces.
Liquid Waste	Liquid waste means any waste that: • Has an angle of repose of less than 5 degrees, or • Becomes free-flowing at or below 60 degrees Celsius or when it is transported, or • Is not generally capable of being picked up by a spade or shovel.
General Solid Waste (putrescible)	Household waste that contains putrescible organics waste from litter bins collected by local councils: • Disposable nappies, incontinence pads or sanitary napkins • Food waste from manufacture, sale, preparation or consumption
General Solid Waste (non-putrescible)	• Glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal • Paper or cardboard • Waste collected for or by local councils from street sweeping • Grit, sediment, litter and gross pollutants from stormwater treatment devices, stormwater management systems that has no free liquids • Garden & wood waste • Containers previously containing dangerous goods, as defined under the Australian Code for the Transport of Dangerous Goods by Road and Rail, where residues have been appropriately removed by washing or vacuuming drained • Oil filters (mechanically crushed), rags and oil-absorbent materials that only contain non-volatile petroleum hydrocarbons and have no free liquids • Drained motor oil containers that do not contain free liquids • Synthetic fibre waste from fibreglass, polyesters and other plastics and is packaged securely to prevent dust emissions, that is confirmed as not being asbestos waste • Virgin excavated natural material • Building and demolition waste • Asphalt waste, including asphalt from road construction and waterproofing works • Cured concrete waste from batch plants • Fully cured and set thermosetting polymers and fibre-reinforcing resins, glues, paints, coatings and inks
Hazardous Waste	• Waste with pH ≤ 2.0 or ≥ pH 12.5 • Containers that have not been cleaned and that contained dangerous goods as described in the Australian Code for the Transport of Dangerous Goods by Road and Rail • Coal tar or coal tar pitch waste, which is the tarry residue from the heating, processing or burning of coal or coke, being materials comprising of more than 1% (by weight) of coal tar or coal tar pitch • Waste lead-acid or nickel-cadmium batteries, being waste generated or separately collected by activities carried out for business, other commercial or community services purposes • Lead paint waste other than solely from residential premises or educational or child care institutions

4.2 Waste Management

Waste management for the project must be undertaken in accordance with the requirements identified above such that waste must be assessed, classified and managed in accordance with the Waste Classification Guidelines, Part 1: Classifying Waste (DECC, April 2008) (Waste Guidelines) prior to dispatching the waste off site.

Waste will be managed in accordance with the NSW Government's Waste Reduction and Purchasing Policy (WRAPP). The following section includes Best Management Practices associated with waste avoidance and management for the Project and is based on the Waste Hierarchy of Control:

- Waste avoidance and waste reduction
- Waste reuse
- Waste recycling and reclamation
- Waste Disposal.

The WRAPP requires Laing O'Rourke to report its waste avoidance and resource recovery performance to the Office of Environment and Heritage. Accordingly Laing O'Rourke is required to recycle suitable materials in order to reduce the volume of waste being placed in landfill sites.

4.2.1 Waste Sources

The following information in this section outlines the wastes anticipated and proposed waste management options to address the waste generated. All waste will be removed progressively with the minimum amount feasible stored on site.

Waste not removed immediately will be stored in designated areas in proprietary storage facilities until it is reused or removed.

Waste will be classified according to the OEH Waste Classification Guidelines (2008).

Waste Category	Waste Generated	Classification
Waste from on-site maintenance and servicing of plant and equipment – note minor servicing only. Major servicing to be completed off site. (non-liquid)	• Drained and crushed oil filters and grease tubes • Used and defective parts • Oil soaked rags • Used oil absorbent materials • Tyres	General Solid
Waste from crib sheds and office areas	• Food scraps, waste wrappers, waste paper towels	General Solid Putrescible
Office and packaging waste (non-liquid)	• Is not contaminated or mixed with other waste; eg Paper, cardboard, glass, plastic (no food scraps etc)	General Solid
Waste from construction activities (non-liquid)	• Waste is not contaminated or mixed with any other type of waste and does not contain asbestos • Concrete pour residues • Aggregates • Damaged and off cuts of PVC pipes • Rejected or defective precast concrete • Steel waste • Used Geotextile • Timber waste	General Solid
Any waste that meets the criteria for assessment as dangerous goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail	• Poisonous (toxic) substances and corrosive substances • Non sag epoxy mortar binder • Synthetic rubber based adhesive • Epoxy resins • Batteries	Hazardous

4.2.2 Separation

Various components of a waste stream shall be separated as indicated below:

- All general solid waste (putrescibles and non putrescible) generated shall be stored in the waste container to be located at the site compound and at other suitable locations within the boundary
- Hazardous waste is to be kept separate at all times. If small amounts are mixed with other wastes, it renders the entire quantity of waste hazardous
- Recyclable material shall also be kept separate in a designated area for later disposal at the appropriate recycling facility
- No hazardous waste is to be transported via barges or other water craft.

4.2.3 Waste Minimisation and Recycling

The following strategies will be implemented on site to minimise the generation of waste:

- Develop and undertake an induction program that promotes environmental safeguards and the adoption of environmentally sensitive work practices to minimise waste and advance the project's sustainability agenda
- Establishment of a combined waste collection system by a reputable service provider
- Using licensed disposal facilities and providing a guarantee to reduce material sent to landfill by 90% or above
- Appropriate quantities of materials will be ordered to minimise wastage
- Quality of materials supplied will be controlled to reduce rework and problems due to quality and additional material consumption
- Prefabricated materials will be used where possible (e.g. pits, endwalls etc)
- Procure a suitable service provider to compost organic wastes from site
- Water required for construction and dust-suppression purposes will be obtained from onsite sedimentation tanks
- Rainwater collection tanks will be proved at the site facilities and plumbed to the toilets and utilised for other applications where applicable.
- Establishment of comingled recycling receptacles for packaging and food container waste
- Waste steel will be separated and disposed of into the steel recycling bin provided on site
- Form work will be reused as often as possible
- Waste timber and formwork will be sent to a recycling facility
- Waste concrete will be utilised as capping material for haul roads or sent to a recycling facility. This small quantity does not require a crushing or screening plant on site. Dust will be controlled with water sprays or similar
- Any green waste is to be mulched and removed from site. Where possible, with regard to the species, it is to be reused for landscaping purposes off site. Green waste will not be stockpiled on site.
- Recycling of general waste such as paper, cardboard, aluminium cans and similar materials from offices and site facilities. Source separation will be provided for these facilities as seen below.
- Other items where economically viable based on the location of the relevant recycling infrastructure

4.2.4 Materials with Recycled Content

The use of recycled materials, as permitted under the various materials specifications will be maximised.

Materials and products with recycled content will be proposed where these are cost and performance competitive, and where the performance is at least the environmental equivalent of the non-recycled alternative.

The cost competitiveness of a product or material will be assessed on a project lifecycle basis, considering issues such as impacts on construction practices, future maintenance and disposal requirements.

All imported material classification documents are required to be reviewed and approved prior to the material coming to site.

The material acceptance process is outlined in the Project Business Plan quality assurance procedures. Imported material will be VENM, ENM or material that is obtained under the Resource Recovery Exemptions as granted by the Office of Environment and Heritage (OEH).

4.2.5 Separation

Various components of a waste stream shall be kept separate as indicated below:

- All general solid waste (putrescibles and non putrescible) generated shall be stored in the waste container to be located at the site compound and at other suitable locations within the boundary
- All organic waste such as food scraps and other similar material is considered general solid waste (putrescibles and non putrescible). This material will be separated on site and retained in an enclosed front-lift bin

- Hazardous waste is to be kept separate at all times. Note that if small amounts are mixed with other wastes, it renders the entire quantity of waste hazardous
- Recyclable material such as ferrous and non-ferrous metals, timber, paper, cardboard, and comingled waste shall also be kept separate in a designated area for later disposal at the appropriate recycling facility.

4.2.6 Storage/Handling

Waste will be removed at weekly intervals by a suitably licensed contractor and sent to approved waste facilities. Construction waste storage and segregation locations can be seen in Appendix 2.

Waste containers are to include front lift, skip and roll-on roll-off bins depending on location requirements.

The handling, storage and transport of hazardous materials and waste shall be in accordance with Laing O'Rourke Construction Health and Safety Management Plan, the National Code of Practice, the relevant Material Safety Data Sheet (MSDS) on the product and the hazardous materials management procedures.

Hazardous waste shall be stored in the dedicated waste container in the site compound and removed as required by a licensed waste contractor to an approved waste facility. Unexpected hazardous waste or asbestos is to be managed in accordance the Hazardous Waste and Asbestos Management Plan. No hazardous waste is to be transported via barges or other water craft.

Waste must not be stored or come in contact with any incompatible waste type.

Storage of waste oils and chemicals shall be in a purpose built secured bunded area. The capacity of the bunded area is to be at least 110% of the chemical stored within. An emergency response spill kit shall be located adjacent to the bunded area.

Advice shall be sought from the Environmental Manager on the classification of a waste if it is not known.

All storage containers and locations for the various waste streams shall be clearly labelled to ensure that mixing of wastes is avoided.

Disposal of surplus excavated material shall only be to approved sites.

All material removed during the desilting of drainage structures and sediment structures shall be disposed of in an approved disposal area on site.

Where spoil material is to be removed from the site for offsite disposal, Laing O'Rourke must ensure that the waste is classified in accordance with the OEH Waste Classification Guidelines.

Records or a material register shall be retained detailing the quantity and classification of spoil material removed from the site.

It is also noted the only the hazardous and/or industrial and/or Group A waste listed below may be generated and/or stored on site:

- waste oil/water, hydrocarbons/water mixtures or emulsions; and
- grease trap waste.

4.3 Stockpile, Impacted Soil Management and Sediment Management

The construction methodology and management measures associated with the classification, excavation, management and placement of excavated materials will be documented in the Excavation, Construction Method Statement. The method statement will be guided by this WMP.

Excavation works on the project include drainage works, footings for retaining walls and structures and surface levelling. Where required, samples will be tested by a NATA accredited laboratory and assessed for compliance with the relevant waste regulations. Where samples indicate a non-conformance to the Site Acceptance Criteria, the material will be stockpiled, covered and bunded.

Any acid sulphate soils will be treated within a specially designed treatment pad which will be constructed in accordance with the project specific Acid Sulphate Soils Management Plan. Acid sulphate soils, should they be identified on site, will be treated and validated and incorporated into the works.

All stockpiled fill will be covered and stabilised when not being and will be secured with sandbags. The base of the stockpile will be bunded using 150mm diameter sediment socks for the full perimeter of the stockpile. The cover will ensure that erosion and contaminated runoff will be eliminated and dust and odours reduced. The sediment socks at the base of the stockpile will ensure that surface water will not erode the stockpile.

Where excavated material needs to be stockpiled for the efficient operation of the works, it will be placed in a dedicated spoil treatment and stockpile area which will be identified on the site erosion and sedimentation plan.

All records of all soil testing will be kept on file in the project records. This filing system will follow the system outlined in the Project Business Plan. Accurate and up to date records are to be maintained for all monitoring. Records are to be retained for the life of the project and archived in accordance with Laing O'Rourke procedures. This shall include (but not be limited to):

- Records for the assessment, treatment and placement of material to be retained on site
- A site plan showing the location and classification of contaminated materials identified and/or stored on site shall be prepared and retained on-site
- Results of all relevant sampling and analysis to be retained in the project records
- Records of all sampling, analysis and validation will be provided to the Client as the works progress
- The records outlined in this section are in addition to the waste management records identified previously and below.

4.4 Mitigation Measures

Measures for construction waste management for the construction phase of the project are outlined below.

Waste Management Measures	Responsibility	Source of Requirement	Timing
Implement measures and strategies in line with this plan	Environment Manager Project Manager	MCoA B2.33	Throughout construction
Only the hazardous and/or industrial and/or Group A waste listed below may be generated and/or stored on site: • waste oil/water, hydrocarbons/water mixtures or emulsions; and • grease trap waste.	Environment Manager	MCoA B2.36	Throughout construction
Minimise construction waste that requires disposal by accurately calculating materials brought to the site and limiting materials	Project Engineer	EIS 34.4.1	Throughout construction

Waste Management Measures	Responsibility	Source of Requirement	Timing
packaging.			
Excess construction materials which are suitable for reuse will be returned to the supplier or stored for future use. Construction wastes which are not suitable for reuse, but are able to be recycled would be temporarily stored onsite in dedicated and secure skips prior to recycling.	Project Engineer	EIS 34.4.1	Throughout construction
Vegetation waste (trees and shrubs) would be shredded or processed onsite into wood chip or mulch, and would be used in the rehabilitation of areas disturbed during construction and for landscaping.	Construction Manager Project Engineer	EIS 34.4.1	Throughout construction
Excavated soil generated during site preparation activities would be stockpiled for reuse in landscaping activities surrounding the new terminal area. Any soil which cannot be disposed of in this manner would be transported offsite to a licensed landfill	Construction Manager Project Engineer	EIS 34.4.1	Throughout construction
Recycling facilities would be provided to maximise recycling of waste materials such as plastic and glass bottles/containers, aluminium cans and paper/cardboard. Separate bins would be provided for food waste. All domestic waste would be collected on a regular basis and transported offsite for disposal to a licensed landfill or recycling facility as appropriate.	Environment Manager	EIS 34.4.1	Throughout construction
Portable toilet facilities would be used during the construction period. These facilities would be emptied on a regular basis and the human wastes would be disposed of offsite in accordance with Council and NSW EPA requirements.	Construction Manager	EIS 34.4.1	Throughout construction
Waste oils and fluids from maintenance activities would be collected and stored and would either be reused on site or removed by a licensed waste contractor.	Construction Manager Environment Manager	EIS 37.2	Throughout construction
Include in waste contractor sub-contract agreements requirements to comply with statutory requirements, report quantities, types, dates and destination of material removed from site and any other relevant waste production/transport information.	Project Manager		Throughout construction
Adopt and promote the reduce, reuse, recycle dispose hierarchy	Environment Manager Project Manager	NSW legislation	Throughout construction
Provide initial and ongoing education to staff and subcontractors regarding the importance of appropriately managing waste.	Environment Manager	Best Practice	Throughout construction
Keep site free of litter and maintain good housekeeping at all times. Place any litter found during inspections in the appropriate recycling or disposal receptacle.	All Personnel	Best Practice	Throughout construction
Recycle / re-use all concrete waste generated at the batch plant through the on-site concrete recycling facility	Environment Manager Project Engineer	Best Practice	Throughout construction

5. Training

All employees and subcontractors will undergo a site specific induction that contains awareness training of the environmental controls to be implemented on this project.

It shall include the necessary awareness of waste management and the procedures to be followed for proper waste recycling and disposal on site.

Toolbox meetings will also be used to reinforce a positive attitude towards waste management.

6. Reporting

Laing O'Rourke will record the classification, volume and method of transport and disposal of waste using a suitable waste register, an example of that to be used is given in Appendix 1. The waste register will record the waste type, quantity, classification, contractor, licence details and details of the licensed receiving facility.

On request, the following information in relation to the storage, treatment and disposal of waste is to be provided to the OEH.

- Amount and classification of waste transported
- Name and license number as required of transporter
- Date transported
- Name and location of the receiving waste facility
- Laing O'Rourke must ensure that the waste is transported to an approved waste facility only
- The transporter must be informed of the type of waste that will be transported.

OEH must be informed of any suspected breach in the Act or Regulations in regards to transportation of waste. Breaches will be reported as outlined in the CEMP.

At the completion of the project a waste accountability report will be prepared based on the data collected over the period of the project. The waste accountability report will consist of information from monthly reports, recycling facilities used during the process and quantities of all soils beneficially reused on the PBT3 project.

An audit of the waste management system will be conducted for each stage of the project including waste progress reports, compliance with regulatory criteria and licensing and incident reporting.

6.1 Auditing of Waste Management Measures

An audit of the waste management measures will be conducted for the project. The audits will include review of:

- Records relating to monthly progress reports
- Monthly waste progress reports and comparison against disposal documentation
- Waste classification data to assess compliance with the requirements of DECC 2008
- Licences held for each of the nominated waste recycling/disposal facilities to assess each facility's ability to (lawfully) accept the materials and
- Any incident reports / corrective action requests relating to waste.

6.2 Waste Tracking

The OEH has identified certain wastes that represent a significant risk to the human health and the environment. The transport and disposal of these wastes must be tracked and the records of movement provided to the OEH.

All waste streams will effectively tracked on the project through the waste register. The high risk wastes identified by the OEH must be tracked whether they are transported into, within or out of NSW.

The waste consignor, transporter and receiving facility all have obligations to ensure that the waste is properly tracked from its point of generation to its disposal location and to ensure that the required documentation is completed. There are specific offences in the POEO Act 1997 relating to waste.

Waste tracking as specified in the statutory requirements will include the following:

- Determine whether the waste to be transported requires tracking. A list of wastes that must be tracked can be found at http://www.environment.nsw.gov.au/resources/owt/trackwaste07522.pdf. A copy of this document is retained on the site server
- For waste that requires tracking, prior approval to transport the waste in the form of a consignment authorisation must be obtained
- A Transport Certificate must accompany the waste while it is being transported
- The certificate must be completed when the waste has been received by the receiving facility
- Each organisation must retain the relevant records
- Any non-compliances must be reported to OEH
- The transport certificate and consignment details must be entered into the OEH's online system
- A single printed copy of the transport certificate must accompany the waste during transport
- Any waste transported to a place that is not a licensed waste facility must be accompanied by a completed section 143 Notice received from the landowner.

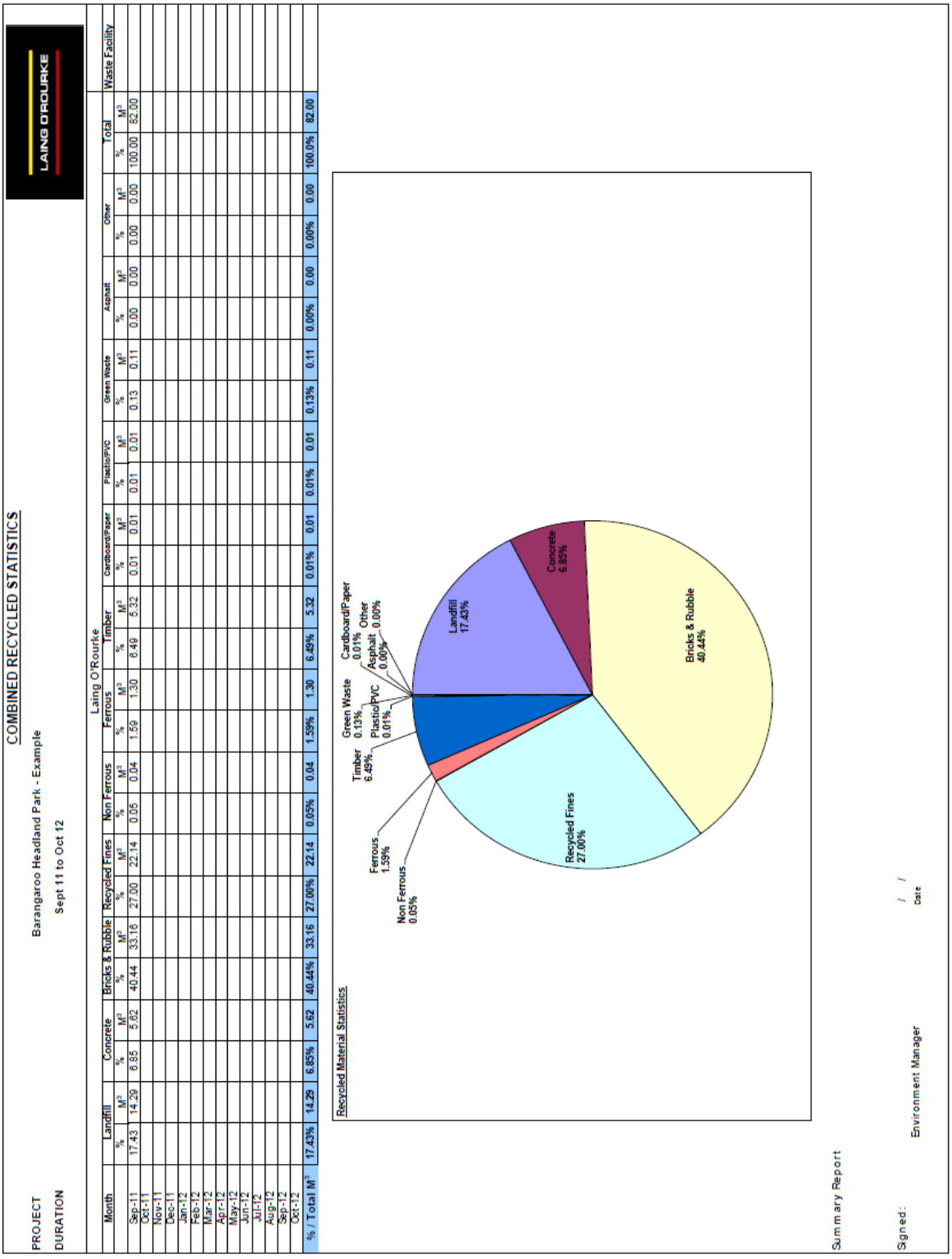
7. Records

Records of waste disposal must be maintained. All material that leaves the site must be classified and its disposal location recorded.

The following checklists shall be utilised to monitor and record waste management controls implemented on this project and completed and filed in accordance with the project filing system:

- Weekly Environmental Inspection Checklist or Form F 1227
- Waste Management Register F 1230 (Appendix 1)
- Where any external waste contractors are used by Laing O'Rourke, a copy of the relevant environment protection licence and disposal forms shall be supplied to upon request
- All records will be filed, stored and archived in accordance with the project filing system and maintained in accordance with the Laing O'Rourke iGate Rules and Guidelines Archiving. In any case, records will be maintained for a minimum of four years.

Appendix 1 Example Waste Management Register



COMBINED RECYCLED STATISTICS

PROJECT: Barangaroo Headland Park - Example

DURATION: Sept 11 to Oct 12

Laing O'Rourke

Month	Landfill		Concrete		Bricks & Rubble		Recycled Fines		Non Ferrous		Ferrous		Timber		Cardboard/Paper		Plastic/PVC		Green Waste		Asphalt		Other		Total		Waste Facility
	%	M³	%	M³	%	M³	%	M³	%	M³	%	M³	%	M³	%	M³	%	M³	%	M³	%	M³	%	M³	%	M³	
Sep-11	17.43	14.29	6.85	5.62	40.44	33.16	27.00	22.14	0.05	0.04	1.59	1.30	6.49	5.32	0.01	0.01	0.01	0.01	0.13	0.11	0.00	0.00	0.00	0.00	100.00	82.00	
Oct-11																											
Nov-11																											
Dec-11																											
Jan-12																											
Feb-12																											
Mar-12																											
Apr-12																											
May-12																											
Jun-12																											
Jul-12																											
Aug-12																											
Sep-12																											
Oct-12																											
% / Total M³	17.43%	14.29	6.85%	5.62	40.44%	33.16	27.00%	22.14	0.05%	0.04	1.59%	1.30	6.49%	5.32	0.01%	0.01	0.01%	0.01	0.13%	0.11	0.00%	0.00	0.00%	0.00	100.0%	82.00	

Recycled Material Statistics

Summary Report

Signed: Environment Manager

Date: / /

Appendix 2 Waste Storage

Waste will be segregated on site where practical and stored in bays on the project site. These areas are shown below.