



## Waste Management Sub-plan

# Western Sydney Airport – Surface and Civil Alignment Works

| Project Name    | Sydney Metro – Western Sydney Airport, Surface and Civil Alignment Works |  |  |
|-----------------|--|--|--|
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#### **Document Approval**

| Rev.  | Date       | Prepared by | Reviewed<br>by | Approved by | Remarks                  |
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| Signa | ature      |             |                |             |                          |





#### **Distribution and Authorisation**

#### **Document Control**

The CPBUI JV Project Director is responsible for ensuring this plan is reviewed and approved. The Environmental Manager is responsible for updating this plan to reflect changes to the project, legal and other requirements, as required.

The controlled master version will be maintained on TeamBinder. All circulated hard copies are deemed to be uncontrolled.

#### **Amendments**

The implementation of this Plan is under the authority of the CPBUI Delegated Authority Matrix. All Contract personnel will perform their duties in accordance with this Plan, supporting plans, and related procedures.

#### **Revision Details**

| Rev. | Details  |
|------|--|
| Α    | First Draft  |
| В    | Revised to address Sydney Metro, Independent Certifier and ER comments and add EPL details |
| С    | Revised to address Sydney Metro, Independent Certifier and ER comments                     |
| 01   | Issued for Construction (All Sydney Metro review comments closed)                          |
| 02   | Revised following internal audit   |





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## **Abbreviations and definitions**

Refer to Definitions, Abbreviations and Acronyms, Sydney Metro – Western Sydney Airport Surface Civil and Alignment Works Package

Table 1 – Abbreviations and definitions

| Abbreviation             | Description   |  |  |
|--------------------------|---|--|--|
| AS/NZS                   | Australian Standard/New Zealand Standard  |  |  |
| CEMF                     | Sydney Metro Construction Environmental Management Framework                            |  |  |
| CEMP                     | Construction Environmental Management Plan  |  |  |
| CLM Act                  | Contaminated Land Management Act 1997   |  |  |
| CoA                      | Ministers Condition of Approval   |  |  |
| Condition                | Planning Minister's Conditions of Approval  |  |  |
| СРВ                      | CPB Contractors Pty Ltd   |  |  |
| CPBUI JV                 | CPB Contractors Pty Limited and United Infrastructure Pty Limited Joint Venture         |  |  |
| CSSI                     | Critical State Significant Infrastructure   |  |  |
| DAWE                     | Department of Agriculture, Water and the Environment                                    |  |  |
| DPE                      | Department of Planning and Environment  |  |  |
| ECM                      | Environmental Control Maps (or referred to as Site Environmental Plan/s (SEPs))         |  |  |
| EIS                      | Environmental Impact Statement  |  |  |
| EMS                      | Environmental Management System   |  |  |
| ENM                      | Excavated Natural Material  |  |  |
| EP&A Act                 | Environmental Planning and Assessment Act 1979 (NSW)                                    |  |  |
| EPA                      | NSW Environment Protection Authority  |  |  |
| EPBC Act                 | Environmental Protection and Biodiversity Conservation Act 1999                         |  |  |
| ER                       | Environmental Representative.   |  |  |
| ESCP                     | Erosion and Sediment Control Plans  |  |  |
| ISC                      | Infrastructure Sustainability Council   |  |  |
| Minister                 | Minister of the NSW Department for Planning and Public Spaces                           |  |  |
| NEPAM 2013               | National Environment Protection (Assessment of Site Contamination) Amended Measure No.1 |  |  |
| NEPC                     | National Environment Protection Council   |  |  |
| PMS                      | Project Management Systems  |  |  |
| POEO Act                 | Protection of the Environment Operations Act 1997                                       |  |  |
| POEO Waste<br>Regulation | Protection of the Environment Operations (Waste) Regulation 2014                        |  |  |
| Principal, the           | Sydney Metro  |  |  |
| Project, the             | Sydney Metro Western Sydney Airport   |  |  |
| REMM                     | Revised Environmental Mitigation Measure  |  |  |
| RRE                      | Resource recovery exemption   |  |  |
| RRO                      | Resource recovery order   |  |  |
| SCAW                     | Surface and Civil Alignment Works   |  |  |
| SM WSA                   | Sydney Metro Western Sydney Airport   |  |  |





| Abbreviation | Description   |
|--------------|---|
| SMP          | Sustainability Management Plan                        |
| Spoil        | All material generated by excavation into the ground  |
| SSI          | State Significant Infrastructure                      |
| SWMS         | Safe Work Method Statement                            |
| UI           | United Infrastructure Pty Limited                     |
| VENM         | Virgin Excavated Natural Material                     |
| WARR         | Waste Avoidance and Resource Recovery Act 2001        |
| WHS Act      | Work Health and Safety Act 2011                       |
| WRAPP        | NSW Governments Waste Reduction and Purchasing Policy |
| WSI          | Western Sydney International                          |





#### Part A Overview

#### 1. Introduction

#### 1.1. Purpose and application

This Waste Management Sub-plan (this Sub-plan) forms part of the Construction Environmental Management Plan (CEMP) within the NSW state jurisdiction for the Sydney Metro - Western Sydney Airport Surface Civil and Alignment Works (SCAW). CPB Contractors and United Infrastructure Joint Venture (herein referred to as CPBUI JV) were awarded the design and construction of the SCAW project by Sydney Metro in March 2022.

This Sub-plan describes how CPBUI will minimise and manage waste throughout the delivery of SCAW off-airport project. These potential impacts will require management and mitigation in accordance with relevant legislation and government policies.

This Sub-plan is to be endorsed by the project Environmental Representative (ER) before the commencement of construction. Construction is not to commence until the CEMP and all required Sub-plans and Monitoring Programs have been endorsed by the ER and/or approved by the Department of Planning and Environment (DPE).

This Sub-plan has been prepared to address the requirements of the:

- Critical State Significant Infrastructure (CSSI) 10051 Planning Approval (dated 23 July 2021)
- Sydney Metro Western Sydney Airport CSSI Staging Report (Revision 6.0) (Staging Report)
- AS/NZS ISO 14001:2016 Environmental Management Systems Requirements with guidance for use
- Sydney Metro Construction Environmental Management Framework (CEMF)
- Environmental Impact Statement (EIS) and Revised Environmental Mitigation Measures (REMMs) from Section 7 of the Submissions Report
- Contractual requirements, including the SCAW Design and Construction Deed and General and Particular Specifications
- Applicable legislation.

#### 1.2. Background

The Sydney Metro Western Sydney Airport will become the transport spine for Greater Western Sydney, connecting communities and travellers with the new Western Sydney International (Nancy-Bird Walton) Airport (referred to as Western Sydney International) and the growing region.

The Sydney Metro Western Sydney Airport EIS was prepared in October 2020 to assess the impacts of construction and operation of the Project and was placed on public exhibition between 21 October 2020 and 2 December 2020. The Project was declared a Critical State Significant Infrastructure (CSSI) Project and is listed in Schedule 5 of State Environmental Planning Policy (State and Regional Development) 2011

The Sydney Metro Western Sydney Airport was approved by the Minister for Planning and Public Spaces on 23 July 2021 (SSI 10051) under section 5.19 of the *NSW Environmental Planning and Assessment Act* 1979 (EP&A Act).

#### 1.3. Project description

The Project will be undertaken on Darug Country and will form part of the future Western Parkland City. The Project involves the construction and operation of a new 23km metro rail line that extends from the existing Sydney Trains suburban T1 western line (at St Marys) in the north to the Aerotropolis (at Bringelly) in the south. The alignment includes a combination of tunnels and civil structures, including viaducts, bridges, and surface and open-cut troughs between the two tunnel sections. The Project also includes six new metro stations, and a stabling and maintenance facility and operational control centre at Orchard Hills. The SCAW package is the second major contract package to be procured for the Project.





The successful and timely completion of the SCAW package is critical to the subsequent construction activities and ultimate completion of the entire Project.

#### 1.3.1. Package scope

The scope for the SCAW package includes approximately 10.6km of alignment up to the underside of track formation from Orchard Hills to the WSI airport. This includes approximately:

- 3.6km of viaduct
  - 400m of viaduct over Blaxland Creek
  - 660m of viaduct over the Patons Lane area and un-named creek
  - 2.5km of viaduct in the Luddenham Road area including across the Warragamba pipeline, at Luddenham Station, across Luddenham Road and across Cosgrove Creek
- 209m of bridges
  - A bridge, approximately 187m long, over the proposed M12 Motorway
  - A bridge, approximately 22m long, over the drainage swale on the WSI airport site
- 6.9km of at-grade alignment
  - 600m at Orchard Hills, south of Lansdowne Road
  - 1.6km alongside the stabling maintenance facility in Orchard Hills
  - 900m to the north of the Warragamba pipelines
  - 1.1km north of the proposed M12 motorway
  - 1.4km south of the proposed M12 Motorway on Elizabeth Derive
  - 1.3km within the Airport site from the northern boundary to the Airport Business Park Station
- Temporary and permanent access roads.

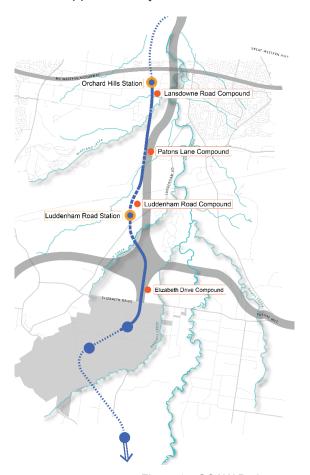


Figure 1 – SCAW Project scope





#### 1.3.2. SCAW construction methodology

Activities that will be undertaken during construction are summarised in Table 2 below.

Table 2 – Activities during construction

| Works          | Activities   |
|----------------|--|
| Early works    | <ul> <li>Investigation works – survey, geotechnical, contamination and utilities</li> <li>Establishment of temporary ancillary facilities, construction site fencing, signage and lighting</li> <li>Pre-clearing vegetation surveys and setting up environmental 'no-go' zones</li> <li>Temporary stockpiling of imported spoil for the stabling and maintenance facility</li> </ul>   |
| Earth works    | <ul> <li>Installation of environmental controls</li> <li>Vegetation clearing</li> <li>Stripping, temporary stockpiling and management of topsoil and unsuitable material</li> <li>Embankment and cutting construction, including the improvement layers/treatments, general fill, structural fill zone and capping layers</li> <li>Importation and reuse of fill materials</li> <li>Placing, compacting and finishing of rail alignment sub-base and base layers</li> <li>Dewatering and backfilling farm dams</li> <li>Preparation of piling pads.</li> </ul> |
| Bridge works   | <ul> <li>Installation of environmental controls</li> <li>Substructure construction from cast in-situ construction with the general sequence of:         <ul> <li>Bored pile construction (mono pile)</li> <li>Pile cap (four) construction with localised excavation at Luddenham Station</li> <li>Pier and headstock construction</li> </ul> </li> <li>Construction of the viaduct structures through the placement of precast concrete segments using a crawler crane</li> <li>Construction of two bridges using precast Super T</li> </ul>                  |
| Drainage works | <ul> <li>Construction of table drains</li> <li>Installation of culverts and other drainage structures</li> <li>Construction of temporary diversion channels</li> <li>Construction of temporary watercourse crossings such as causeways</li> <li>Installation of scour protection measures.</li> </ul>  |





#### 2. Structure of this Plan

#### 2.1. Plan Purpose and Objectives

This CEMP Sub-plan forms part of the Project Management System (PMS). It is part of a suite of plans that together outline how the SCAW package will manage waste during construction to ensure an integrated approach to meeting contract requirements.

In addition to the Project Management Plan, other Project Plans that interface with this Sub-plan are detailed in Table 3.

This plan has the following structure:

| Part A: Overview                  | Section 1: Purpose, Background/Context, SCAW scope of works Section 2: Structure of This Plan, Objectives and targets Section 3: Legal and Other Requirements Section 4: Anticipated waste streams and classification Section 5: Aspects and Impacts Section 6: Waste and Spoil Management Strategy |
|-----------------------------------|---|
| Part B:<br>Implementation<br>Plan | This section outlines in detail the key processes and systems to support implementation of environmental management outcomes for the project: Element 1: Training Element 2: Monitoring and Reporting Element 3: Auditing, Review and Improvement Element 4: Project Specific Requirements          |
| Part C: Appendices                | This section includes appendices and annexures providing additional detail that support this plan.  |

#### 2.1.1. Related Documents

As a sub-plan to the CEMP, Table 3 shows the interrelationships with other project plans and documents.

Table 3 – Associated and supporting documents

| Associated Plan                                  | Description  |  |
|--|--|--|
| Soil and Water Management<br>Sub-Plan            | Describes the management of contaminated material including classification of excavated material. The Plan includes references to procedures for preparing Erosion and Sediment Control Plans (ESCPs) that will manage waste storage and handling impacts.                         |  |
| Flora and Fauna<br>Management Sub-plan           | Identifies reuse and recycling measures in relation to green waste.  |  |
| Spoil Management Sub-plan                        | The Spoil Management Plan provides detail relating to the management of spoil.   |  |
| Sustainability Management<br>Plan                | This Plan includes a carbon and energy management strategy that provides detail on emission reduction strategies.  The SMP will include a construction logistics plan to manage the sustainable delivery of goods and materials and sustainable group travel for staff and workers |  |
| Overarching Construction Traffic Management Plan | Addresses the traffic and transport impacts of waste transport.  |  |
| Visual Amenity Management Plan                   | This Plan identifies waste management measures that will be implemented at construction sites.   |  |
| Hazards and Risk Sub-plan                        | This Plan outlines the measures for storage and transportation of hazardous materials to be used on sites.   |  |





| Associated Plan              | Description   |
|------------------------------|---|
| On Airport CEMP and Subplans | Details requirements for environmental management on the Western Sydney Airport. This is a Sydney Metro document produced for the works being undertaken on Commonwealth Land |

#### 2.1.2. Objectives and Targets

The key objective of this Sub-plan is to minimise waste, and appropriately manage waste in accordance with applicable requirements. Section 14.1 (a) of the CEMF sets out the following management objectives relevant to SCAW for construction waste management:

- i) Minimise waste throughout the project life-cycle;
- ii) Waste management strategies for off-airport works will be implemented in accordance with the Waste Avoidance and Resource Recovery Act 2001 management hierarchy as follows:
  - Avoidance of unnecessary resource consumption;
  - Resource recovery (including reuse, reprocessing, recycling and energy recovery); and
  - Disposal.

The targets for waste management outlined in Section 14.1 (b) of the CEMF are:

 Targets for the recovery, recycling or reuse of construction waste, and beneficial reuse of spoil will be provided by the Principal Contractor.

Reduction targets that address the CEMF objectives are identified in the Sustainability Management Plan. The management of spoil and spoil reuse opportunities are identified in the Spoil Management Plan. The Project EIS Revised Performance Objectives relevant to this Sub-Plan are addressed in Table 4.

Table 4: Objectives and targets

| Objective  | Target (KPI)   | Measurement Tool  |
|--|--|---|
| Spoil that is classified as virgin excavated natural material (VENM), excavated natural material (ENM), subject to a resource recovery order/resource recovery exemption under the Protection of the Environment Operations (Waste) Regulation 2014 or is otherwise reusable, would be reused within the project footprint | 100 % of useable spoil is reused in accordance with the spoil reuse hierarchy – either on-site or beneficial   | Spoil Management Plan<br>Sustainability<br>Management Plan<br>Waste Tracking<br>Register<br>Inspection Records<br>Audit Reports |
| Recycling targets are set for construction and demolition wastes   | A minimum 95 % recycling target is achieved for construction and demolition waste  | Sustainability Management Plan Waste Tracking Register  |
| The SCAW Environment Policy includes a commitment to implement sustainable procurement initiatives that provide environmental and social improvement and meet the requirements of the BS8903 Principles and Framework for Procuring Sustainably.   | Products made from recycled content are prioritised. At least one initiative is identified during the SCAW project to use products from recycled content | Sustainability Management Plan Waste Tracking Register Material Tracking Register   |





| Objective   | Target (KPI)  | Measurement Tool                               |
|---|---|--|
| The use of potable water for non-<br>potable purposes is avoided if<br>non-potable water is available | No more than 1000KL of potable water is used for the SCAW project | Water tracking records<br>Water Reuse Strategy |
| The reuse of water is maximised, either on-site or off-site   | No more than 1000KL of potable water is used for the SCAW project | Water tracking records Water Reuse Strategy    |





## 3. Legal and Other Requirements

#### 3.1. Legislation and Related Requirements

Key legislation relevant to waste management includes:

- Environmental Planning and Assessment Act 1979 (EP&A Act). Protection of the Environment Operations Act 1997 (POEO Act)
- Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation)
- Waste Avoidance and Resource Recovery Act 2001 (WARR Act)
- Contaminated Land Management Act 1997 (CLM Act)
- Work Health and Safety Act 2011 (WHS Act)

Refer to Section 4 of the CEMP for further details of the relevant legislation.

#### 3.2. Project Compliance Requirements

All works to be delivered for SCAW have been assessed and approved under the EP&A Act for the Critical State Significant Infrastructure application number 10051. The on-airport works are a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) relating to approval EPBC 2019/8541.

There are three (3) principal statutory schemes that govern the planning and assessment process for the Sydney Metro Western Sydney Airport (SM-WSA) project:

#### Commonwealth:

- SCAW works have been assessed and approved under the Airports Act 1996 (Airports Act) for works located on Commonwealth land within the boundary of the Western Sydney International Airport (on-airport).
- SCAW works have been assessed and approved as a controlled action by the Department of Agriculture, Water and the Environment (DAWE) under Part 9 of the EPBC Act on 3 June 2021 (EPBC2020/8687) for the impacts on threatened species and communities and Commonwealth Land (off-airport).

#### State:

- SCAW works have been assessed and approved via number of applications under Division 5.2 of the EP&A Act and are classified as Critical State Significant Infrastructure (SSI 10051) (off-airport).
- Detailed environmental assessments have been carried out to gain the necessary Commonwealth and State planning approvals.

#### 3.2.1. Project Specific Requirements:

Element 4: Project Specific Requirements contains a summary of the key compliance requirements relevant to waste management measures which are applicable to SCAW. This includes relevant CoA, REMMs, CEMF requirements, EIS performance outcomes and contractual requirements.

#### 3.3. Guidelines and Standards

Additional guidelines and standards relating to the management of waste management include:

- Waste Classification Guidelines, Part 1: Classifying Waste
- Waste Classification Guidelines Part 4: Acid Sulfate Soils
- Environmental Best Practice Guidelines for Concreting Contractors (DEC 2004)
- Australian Dangerous Goods Code 7th Edition (ADG7)
- Construction and demolition waste: a management toolkit
- NSW Governments Waste Reduction and Purchasing Policy (WRAPP)





## 4. Aspects and Impacts

#### 4.1. Overview of Waste Streams

The EIS identified the following waste streams would be generated during construction of the Project which are detailed in Table 5.

Table 5 – Indicative types of waste generated during SCAW construction

| Activity  | Waste Stream   | Where addressed                       |
|---|--|---------------------------------------|
| Excavations, cuttings and   | Spoil  | Spoil Management Plan                 |
| general earthworks  | Contaminated soil including<br>PASS and ASS, General Sold<br>Waste or Restricted Solid Waste                 | Soil and Water Management<br>Sub-plan |
|   | Wastewater to be disposed (liquid waste)   | This Sub-plan                         |
|   | Wastewater to be treated/reused  | Soil and Water Management<br>Sub-plan |
| Dust suppression, wash down of plant and equipment, and staff amenities at construction sites | Sediment-laden and/or potentially contaminated wastewater, sewage and grey water (wastewater to be disposed) | This Sub-plan                         |
|   | Wastewater to be treated/reused  | Soil and Water Management<br>Sub-plan |
| General construction activities and resource use  | Concrete waste, timber formwork, scrap metal, steel, plasterboard, cable and packaging material              | This Sub-plan                         |
|   | Spoil  | Spoil Management Sub-plan             |
| Maintenance of construction plant, vehicles and equipment                                     | Adhesives, lubricants, waste fuels and oils, engine coolant, batteries, hoses and tyres (liquid waste)       | This Sub-plan                         |
|   | Hazardous or special waste   | Project Health and Safety Plan/s      |
| Activities at construction site offices   | General waste including paper, cardboard, plastics, glass and printer cartridges                             | This Sub-plan                         |
| Clearing and grubbing of vegetation, landscaped and/or  | Green waste  | This Sub-plan                         |
| turfed areas  | Weeds/noxious weeds  | Flora and Fauna Management<br>Plan    |

The various waste streams predicted during the SCAW construction not available for reuse on-site, example waste classifications and estimated quantities for these waste streams are presented in





Table 6. Quantities of resources and materials required during construction would be managed as detailed in Section 5.3.





Table 6 - Anticipated waste streams for recycling / off-site disposal and example classifications

| Waste Stream   | Waste Classification  | Estimated Quantities to be Generated | Waste fate                                  |
|--|---|--------------------------------------|---|
| Asbestos   | Special Waste   | 100 tonnes                           | Off-site disposal                           |
| Concrete   | General Solid Waste (non-putrescible)                                   | 10,000 tonnes                        | Recycled                                    |
| Reclaimed Asphalt<br>Pavement  | General Solid Waste (non-putrescible)                                   | 200 tonnes                           | Recycled / Beneficial reuse under a RRO/RRE |
| General recyclables (glass, cans, paper, cardboard)  | General Solid Waste (non-putrescible)                                   | 250 tonnes                           | Recycled                                    |
| Office waste (food waste, paper, cardboard, plastics, glass, printer cartridges)   | General Solid Waste (putrescible)                                       | 100 tonne                            | Off-site disposal /<br>Recycled             |
| General mixed construction waste   | General Solid Waste (non-putrescible)                                   | 2,400 tonnes                         | Recycled                                    |
| Metal waste/ off cuts (i.e. steel reinforcement), wire waste / off cuts, PVC waste/ off cuts (e.g. piping and conduits), timber waste / off cuts | General Solid Waste (non-putrescible)                                   | 250 tonnes                           | Recycled                                    |
| Green waste  | General Solid Waste (non-putrescible)                                   | 2,000 tonnes                         | Recycled / Beneficial reuse under a RRO/RRE |
| Potentially contaminated spoil   | General Sold Waste,<br>Restricted Solid<br>Waste or Hazardous<br>Waste. | 1,000 tonnes                         | Off-site disposal                           |
| Waste oil  | Liquid Waste  | 1,000 litres                         | Off-site disposal                           |
| Wastewater   | Liquid Waste  | 100,000 litres                       | Recycled                                    |
| Septic   | Liquid Waste  | 1,000 litres                         | Off-site disposal                           |
| Waste tyres  | Special Waste   | Nil                                  | Recycled                                    |

#### **4.1.1.** Impacts

The EIS identified the potential for residual impacts associated with the Project as a whole, would include generated of un-useable spoil during tunnelling due to contamination or acid sulfate soils. While SCAW does not involve tunnelling, all spoil that will not be reused would be assessed, classified, managed, transported and disposed of in accordance with the Waste Classification Guideline/s and the Waste Regulation as detailed in the Spoil Management Sub-plan.

Resource consumption minimisation and material reuse maximisation strategies are provided in the Sustainability Management Plan including material selection and procurement strategies.

The potential for impacts has been considered in a SCAW risk assessment provided in Appendix C5 of the CEMP.





#### 5. Waste Management Strategy

#### **5.1. Waste Hierarchy**

In accordance with Condition E122, during delivery of the SCAW waste will be prioritised according to the principles of a resource management hierarchy embodied in the WARR Act as listed below:

- 1. waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced (refer to Section 5.3)
- 2. where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered (refer to Section 5.5.2); and
- 3. Where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.

The management of waste during the delivery of SCAW will be undertaken in accordance with the objectives of the WARR Act, and the legislation and guidelines as detailed in Section 3.

#### 5.2. Waste Classification

All waste generated on the site must be assessed and classified in accordance with the Waste Classification Guidelines (Part 1: Classifying Waste) which requires waste material to be classified into waste classes as defined in clause 49 of Schedule 1 of the POEO Act as either:

- Special waste
- Liquid waste
- Hazardous waste
- Restricted solid waste
- General solid waste (putrescible)
- General solid waste (non-putrescible)

In situ classification of spoil material and any material that has not been previously classified and is unexpectedly encountered during excavation will be managed in accordance with the Soil and Water Management Sub-plan.

#### 5.3. Waste Avoidance and Minimisation

As detailed in Section 4.1.1, resource consumption minimisation and material reuse maximisation strategies are detailed in the Sustainability Management Plan including material selection and procurement strategies. Strategies that would be employed include:

- Efficient resource planning regarding the delivery and storage of resources to avoid surplus stock and waste
- Planning and coordination across worksites to maximise usage and avoid waste
- Procurement strategies that manage effective identification of quantity / volume and where possible, take back arrangements.

#### 5.3.1. Reuse and Recycling Initiatives

Where avoidance and/or minimisation is not possible, CPBUI will reuse waste on or off site, including resource recovery via:

- Resource recovery exemptions (RRE) / resource recovery orders (RRO)
- Approved recycling facility
- Approved notice under Section 143 of the POEO Act.

Specific measures to reuse and recycle waste during construction will include:

- Reuse of green waste and topsoil for site landscaping (excluding non-native / weeds)
- 100% reuse of useable spoil
- 95% reuse of general demolition waste
- 95% reuse of construction waste





- Reuse of native trees and vegetation
- Water reuse in accordance with the Water Reuse Strategy
- General waste (office/crib) appropriate receptacles will be provided to maximise recycling.

#### 5.4. Waste Handling and Storage

Where waste is required to be handled and stored onsite prior to onsite reuse or offsite recycling/disposal, the following measures will apply:

- Spoil, topsoil and mulch are to be stockpiled onsite in allocated areas identified in Site Environmental Plan/s, where appropriate, and mitigation measures for dust control and surface water management will be implemented in accordance with the Air Quality Management Sub-plan the Spoil Management Plan and the Soil and Water Management Sub-plan
- Contaminated spoil will be managed in accordance with the Soil and Water Management Sub-plan and the Spoil Management Plan
- PASS/ASS will be managed in accordance with the Acid Sulfate Management Procedure in the Soil and Water Management Sub-plan
- Liquid wastes are to be stored in appropriate containers in bunded areas until transported offsite
- Waste fuel, oils and other hazardous material will be stored in a ventilated, bunded area prior to disposal by a licensed contractor
- Special or hazardous waste will be segregated, contained and stored separately in an appropriately bunded area. Further detail on management of special or hazardous waste management is within the Project Health and Safety Plan/s.
- Management of unexpected finds of asbestos will be managed in accordance with the Unexpected Contaminated Land and Asbestos Finds Procedure in the Soil and Water Management Sub-plan.

Waste management areas will be established during construction, at which waste (including recyclables) will be stored. Most construction waste will be stored in co-mingled bins for processing offsite to maximise resource recovery. Office waste will be segregated to maximise resource recovery. Stockpiles and bins will be appropriately labelled, managed and monitored.

The waste storage areas will also allow for the separation of waste streams based on their management requirements, and will therefore include:

- Wheeled bins:
- "Skip" bins; and
- Bunded bulk storage for fuels and oils.

Monitoring of the above waste handling and storage strategies will be undertaken primarily through the implementation of environmental inspections as detailed further in Part B, Element 2: Monitoring and Reporting.

#### 5.4.1. Asbestos management

When an unexpected asbestos find occurs, it will be managed in accordance with the SCAW Asbestos Management Plan (SMWSASCA-CPU-1NL-NL000-HS-PLN-000013) and the following steps as a minimum:

- The area is to be demarcated, works in the area to cease and workers warned
- Notify the Site Supervisor who will notify the Project Manager
- Control dust with dust suppression or by covering the area if feasible.
- Arrange for testing of the suspected asbestos and air monitoring of the area (if required)
- Engage a licensed asbestos removalist to provide recommendations to treat the area, as required
- Obtain a clearance certificate on completion of removal from a licensed asbestos assessor. If the find
  is asbestos (either friable or bonded) in soil, clearance and a validation report will be required from a
  suitably qualified contaminated land consultant
- The area is to be made safe.





#### 5.5. Waste Transport and Disposal

Material that is unable to be reused or recycled on site will be transported to an offsite facility following waste classification. Wastes that are unable to be reused or recycled or retained will be disposed of offsite to an NSW EPA approved waste management facility following classification in accordance with the POEO Act and the WARR Act. CPBUI will implement a hold point to ensure that material that is unable to be reused or recycled on site will be exported to a site licenced by the EPA to accept the waste, or in accordance with a valid RRE or RRO, or to any other site that can lawfully accept such waste. Refer to Section 6 of the CEMP for the register of hold points. Waste disposal will involve:

- Disposal to site licenced by the EPA to accept the waste; or
- Disposal to another site that can lawfully accept such waste under Section 143 of the POEO Act.

Waste management facilities situated in the Western Sydney region will be utilised for reuse, recycling, recovery and treatment of waste generated by SCAW activities. Prior to waste being taken to a waste disposal facility, the Environmental Manager will review and approve the proposed waste facility as a hold point. The hold point include the following steps:

- review and approval of the completed Section 143 documentation if the material is going to a receiving site not licensed by the EPA
- Review of receiving sites development application, planning approval or EPL to ensure the site holds the correct licence and/or approval to receive such material. Appendix C1 – Example Waste Tracking Register for Waste Disposal Locations lists the location of licenced waste disposal facilities in proximity to the SCAW worksites and will be updated for any other disposal or beneficial reuse sites are identified during the Project.

Disposal of the material will not occur until the Environment Manager has released the hold point. Approved waste sites, both EPL licensed or beneficial reuse sites under the POEO Act will be included on the waste disposal register (Appendix C1 – Example Waste Tracking Register for Waste Disposal Locations) and material taken to this location will be tracked as described in Section 5.5.1.

All material moved from the SCAW worksite/s will be tracked from cradle to grave using a Waste Tracking Register (refer to Section 5.5.1) and example in Appendix C4 – Example Waste Tracking Register.

#### 5.5.1. Waste Tracking and Reporting

All waste disposals undertaken by licenced contractors will be tracked by the receipt of waste disposal dockets. Quantities and types of wastes and the reuse or disposal will be collated in a Waste Tracking Register. The Waste Tracking Register will include the following information:

- Date transported
- Haulage contractor
- Material type
- Waste classification
- Quantity
- Waste receival location
- EPL / Approval Reference
- Truck registration
- Docket numbers (haulage, receival, weighbridge)

Waste dockets associated with removal and disposal of waste (including spoil) from the SCAW package are to be retained and referenced in the Waste Tracking Register. Where available, soil classification reports are also to be retained. In addition, waste reporting requirements (including reporting of spoil reuse and recycling statistics) are addressed in the Sustainability Management Plan.

CPBUI JV will supply data on waste and recycling to Sydney Metro in the agreed Sustainability Reporting template and within an agreed timeframe. Reporting will be undertaken with a one-month lag to ensure the accuracy of data. Data will be maintained within the CPB management system reporting tool (Enablon Synergy).





#### 5.5.2. Waste Exemptions

Clause 92 of the Waste Regulation enables the NSW EPA to grant exemptions to the licensing and payment of levies for the land application or use of waste.

The EPA has issued general exemptions under Clause 93 of the Waste Regulation, that do not require further approval<sup>1</sup>. The current exemptions and orders that may be applicable to SCAW include:

- Excavated natural material order 2014 / Excavated natural material exemption 2014
- Excavated public road
- Reclaimed asphalt pavement order 2014 / Reclaimed asphalt pavement exemption 2014
- Recovered aggregate exemption 2014 / Recovered aggregate order 2014

A specific exemption may be granted where an application is made to the EPA. Where waste materials are to be removed from site, a review of the applicable EPA waste exemptions will be undertaken to determine if the material classifies as specific exemption and if a suitable receiving site can be identified.

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<sup>&</sup>lt;sup>1</sup> Current orders and exemptions can be found at <a href="https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption">https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption</a>





## 6. Waste Management Controls

CPBUI will implement mitigation measures that address Planning Approval Conditions, CEMF requirements and REMMs (refer to Table 7). Refer to the Sustainability Management Plan for measures related to resource consumption.

Table 7: Waste management measures

| Reference | Measure  | Timing                 | Source                                       | Responsibility   |
|-----------|--|------------------------|--|--|
| WMM1      | Waste generated during construction will be managed in accordance with the following waste management hierarchy:  1. Avoidance 2. Resource recovery (including reuse, reprocessing, recycling and energy recovery) and 3. Disposal.                              | During<br>construction | CEMF Section<br>14.1(a)<br>Condition<br>E122 | Environment<br>Manager<br>Sustainability<br>Manager<br>Site<br>Supervisor      |
| WMM2      | The Site Environmental Induction will include waste minimisation and reuse measures.   | Pre-<br>construction   | Best practice                                | Environment<br>Manager   |
| WMM3      | In-situ waste classification of material will<br>be undertaken prior to commencement of<br>excavation. Excavation will target areas of<br>exposure risk as a priority.   | Pre-<br>construction   | Best practice                                | Environment<br>Manager<br>Site<br>Supervisor                                   |
| WMM4      | Classification of material will be undertaken by a contamination specialist in accordance with the NSW Waste Classification Guideline.   | Pre-<br>construction   | Condition<br>E124                            | Environment<br>Manager<br>Site<br>Supervisor                                   |
| WMM5      | Prior to transporting wastes to a receiving site where an EPA licence is not required (such as a beneficial reuse site), the Environment Manager will review and approve the receiving site as having the appropriate licences / approvals to receive the waste. | During<br>construction | REMM WR3<br>CEMF Section<br>14.1(a)          | Environment<br>Manager<br>Project<br>Engineers                                 |
| WMM6      | The use of raw materials (noise hoarding, site fencing, etc) will be reused or shared, between worksites sites where feasible and reasonable.  | During construction    | CEMF Section<br>14.3(a)                      | Site<br>Supervisor<br>Environmental<br>Manager<br>Environmental<br>Coordinator |
| WMM7      | Waste streams would be segregated to avoid cross-contamination of materials and maximise reuse and recycling opportunities.  | During construction    | CEMF Section<br>14.1(a)<br>REMM WR2          | Site<br>Supervisor<br>Environmental<br>Manager                                 |
| WMM8      | A central waste area (or areas) would be established, at which waste (including recyclables) would be stored or stockpiled. Stockpiles and bins would be appropriately labelled, managed and monitored till being removed from site.                             | Pre-<br>construction   | CEMF Section<br>14.1(a)                      | Site<br>Supervisor<br>Environmental<br>Manager                                 |





| Reference | Measure  | Timing               | Source   | Responsibility   |
|-----------|--|----------------------|----------|--|
| WMM9      | Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging.  | Pre-<br>construction | REMM WR1 | Project Engineers Site Supervisor Sustainability Manager Environmental Manager |
| WMM10     | Waste will be tracked using a Waste Tracking Register.   | During construction  | REMM WR3 | Environment<br>Manager   |
| WMM11     | A hazardous materials analysis would be carried out prior to stripping and demolition of structures and buildings which are suspected of containing hazardous materials (particularly asbestos) Hazardous materials and special waste (such as asbestos) would be removed and disposed of in accordance with the relevant legislation, codes of practice and Australian Standards (including the Work Health and Safety and Regulation 2011 (NSW)) | Pre-<br>construction | REMM HR3 | Site<br>Supervisor<br>Safety<br>Manager  |





#### **6.1.** Cumulative impacts

CPBUI will manage the potential for cumulative waste management impacts via coordination and engagement with key stakeholders and other SSI projects in accordance with the Sydney Metro Construction Cumulative Impacts Management Plan (developed in accordance with REMM C1) and the SCAW Community Communications Strategy.

Proposed consultation forums that will facilitate interface during construction and allow for proactive identification and management of cumulative impacts will include:

- Internal construction meetings
- Interface/coordination meetings between other projects, and
- Environment and Planning meetings with Sydney Metro.

If the potential for cumulative impacts are identified, adaptive management will be applied. CPBUI will identify if the controls within this Plan are sufficient to address the potential for cumulative impacts and/or identify of additional measure are required to be applied, including the requirement for increased environmental monitoring.

## Part B Implementation Plan

#### 7. Elements and Expectations

Part B of this Sub-plan explains how potential waste impacts during the SCAW Works will be minimised and managed. Compliance with all elements is required at all times to minimise the likelihood of causing unauthorised environmental harm and maximise the uptake of opportunities to reduce environmental impact.

Part B contains the following:

**Environmental Elements and Expectations:** These describe what is required of CPBUI JV to implement the objectives of the Environment and Sustainability Policy Statement and system requirements:

Element – Key aspects for managing this function in delivering the SCAW Works

**Expectation** – The outcomes achieved as part of each Element.

**Requirements**: These are the specific actions required to demonstrate compliance with the Elements and Expectations.

**Responsibility and Key Contributor**: Designation of responsibility for achieving compliance with the stated Expectation. Key contributors assist/contribute to achieving compliance.

**Deliverables**: Tangible outcomes produced to demonstrate compliance with the environmental Elements and Expectations.





## **Element 1: Training**

CPBUI will ensure that SCAW project personnel can competently perform their duties and meet environmental obligations

| Expe | ctations  | How we will meet the Expectations (minimum requirements)   | Responsibility Key Contributor  | Deliverables                             |
|------|---|--|---|--|
| 1.1  | All personnel have completed an induction containing relevant environmental information before they are authorised to work on the project | All personnel working on the SCAW will undertake a site induction, which will provide initial training on various environmental aspects, including waste management. It will cover the requirements of this Sub-plan including:  Potential waste streams and management of waste stream  Waste handling and storage  Impacts to the environment and surrounding community  Mitigation measures | Senior HR Advisor Environmental Manager Environmental Coordinators            | Induction presentation Induction records |
| 1.2  | Toolbox talks are used to reinforce key management requirements and lessons learnt  | Toolbox talks will be held regularly during site establishment and throughout construction. They will reinforce and reiterate information from inductions.  Toolbox talks will be undertaken with key site people on waste management measures.  | Environmental Manager/Coordinator Site Supervisors Environmental Coordinators | Toolbox presentations Toolbox records    |





## **Element 2: Monitoring and Reporting**

All staff, employees and subcontractors will actively drive compliant environmental performance of SCAW.

| Exp | ectations   | How we will meet the Expectations (minimum requirements)   | Responsibility<br>Key Contributor   | Deliverables   |
|-----|---|--|---|--|
| 2.1 | Worksites are regularly inspected to ensure the adequacy of controls and compliance with the requirements of this Subplan | Site Supervisor to undertake daily inspections of worksite to ensure management of waste and will undertake adaptive management where required.  Weekly inspection of waste management practices will be undertaken as part of Joint Environment Inspections.  A regular inspection program for waste management monitoring will be conducted as follows:  Details of daily inspections undertaken by the Site Supervisor will be recorded  Routine weekly inspections are to be conducted to monitor waste mitigation measures in active worksites and waste tracking process. Weekly inspections will be documented and summarised in monthly reports.  Environment inspections are to be completed by the Environmental Coordinator and/or Superintendents/ Site Supervisor, and works are to be stopped or modified if:  Management and monitoring details are set out in this section.  ER inspections will include review of implementation of waste management and mitigation measures.  Refer to Element 3 of the CEMP for more information on monitoring and inspections. | Site Supervisors Environmental Manager Environmental Coordinators ER                    | Environment and Sustainability Inspection Checklists Site Diary entries ER Reports |
| 2.2 | Waste<br>Reporting  | <ul> <li>The following compliance records will be retained:</li> <li>Waste monitoring data will be collected and used for recording and reporting purposes including the waste tracking register and waste dockets</li> <li>WRAPP Reporting requirements</li> <li>Procurement and purchasing records (refer to Sustainability Management Plan).</li> </ul>   | Sustainability Manager Site Supervisor Environmental Manager Environmental Coordinators | Waste tracking register Inspection checklists Site diary entries                   |





| All environmental management records will be accessible onsite for the duration of the SCAW Works and retained for a minimum of seven years. Refer to Element 11 of the CEMP for full details on document and record management. | on<br>mi |  |
|--|----------|--|

## **Element 3: Auditing, Review and Improvement**

CPBUI will continually improve its environmental systems and performance by monitoring and reviewing their effectiveness

| Expe | ctations  | How we will meet the Expectations (minimum requirements)  | Responsibility Key Contributor  | Deliverables  |
|------|---|---|---|---|
| 3.1  | Audits are undertaken to ensure compliance with the requirements of this Sub-plan | Procedures for corrective actions are addressed in Element 3 of the CEMP.  Audits will be performed in accordance with Element 12 of the CEMP and this Sub-plan. Associated documents or procedures will be updated if required. Review and confirmation of the implementation of waste reduction and management measures described in this Plan will be undertaken as part of the auditing and inspection regimes described in Element 3 of the CEMP.  The ER may participate in or conduct audits to ensure the implementation of this Sub-plan and related documents is compliant with what is stated in the documents and the terms of the planning approvals.  Waste to Final Destination Audits will be undertaken at least 6-monthly during construction. To meet the requirements of the Infrastructure Sustainability Council rating (ISV1.2 Was-1 level 2). | Environmental Manager Environmental Coordinators Sustainability Manager ER              | Audit Reports Corrective Action Reports Waste to Destination Audits |
| 3.2  | All non-compliances are reported and actioned                                     | A waste management non-compliance can generally be defined as a failure to comply with the Project Planning Approval and/or this Sub-plan.  Where a non-compliance is raised as part of an audit or an incident or complaint investigation the audit, incident or complaint report may be used to close out the non-compliance and it is not necessary to raise a separate non-compliance reporting process.  | Environmental Manager Sustainability Manager Environmental Coordinators Quality Manager | Audit Reports Corrective Action Reports                             |





|     |   |  | CONTRACT   | ORS   |
|-----|---|--|--|---|
| 3.1 | Audits are<br>undertaken to ensure<br>compliance with the<br>requirements of this<br>Sub-plan | Procedures for corrective actions are addressed in Element 3 of the CEMP.  Audits will be performed in accordance with Element 12 of the CEMP and this Sub-plan. Associated documents or procedures will be updated if required. Review and confirmation of the implementation of waste reduction and management measures described in this Plan will be undertaken as part of the auditing and inspection regimes described in Element 3 of the CEMP. | Environmental Manager Environmental Coordinators Sustainability Manager ER | Audit Reports Corrective Action Reports Waste to Destination Audits |
|     |   | The ER may participate in or conduct audits to ensure the implementation of this Sub-plan and related documents is compliant with what is stated in the documents and the terms of the planning approvals.   |  |   |
|     |   | Waste to Final Destination Audits will be undertaken at least 6-monthly during construction. To meet the requirements of the Infrastructure Sustainability Council rating (ISV1.2 Was-1 level 2).  |  |   |
|     |   | Corrective and Preventative Actions may also be raised in accordance with Element 3 of the CEMP.   |  |   |





## **Element 4: Project Specific Requirements**

| No          | Requirement  | How we will meet the Expectations (minimum requirements) | Responsibility Key Contributor                                   | Timing       |
|-------------|--|--|--|--------------|
| CoA C1      | Construction Environmental Management Plans (CEMPs) and CEMP Sub-plans must be prepared in accordance with the Construction Environmental Management Framework (CEMF) included in the documents listed in Condition A1 to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1 will be implemented and achieved during construction. | This Sub-plan  | Environmental Manager  | Construction |
| CoA<br>E99  | The Unexpected Contaminated Land and Asbestos Finds Procedure must be implemented throughout construction.   | Section 1.1 Soil and Water Management Sub-plan           | Site Supervisor Safety<br>Manager Environmental<br>Manager       | Construction |
| CoA<br>E104 | The locations of all Heavy Vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one (1) year following the completion of construction.  | Spoil Management Sub-<br>plan                            | Site Supervisor<br>Environmental Manager                         | Construction |
| CoA<br>E122 | Waste generated during construction and operation must be dealt with in accordance with the following priorities:  (a)waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced;  | Section 5.1  | Site Supervisor Environmental Manager Environmental Coordinators | Construction |
|             | (b)where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered; and  | Section 5.3  | Site Supervisor Environmental Manager Environmental Coordinators | Construction |
|             | (c) where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.   | Section 5.3  | Site Supervisor Environmental Manager Environmental Coordinators | Construction |
| CoA<br>E123 | The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must   | Section 1.1<br>Section 5.4                               | Environmental Manager  | Construction |





|             |   | CONTRACTORS  |  |                      |  |
|-------------|---|--|--|----------------------|--|
| No          | Requirement   | How we will meet the Expectations (minimum requirements) | Responsibility Key Contributor   | Timing               |  |
|             | comply with the conditions of the current EPL for the CSSI, or<br>be done in accordance with a Resource Recovery Exemption<br>or Order issued under the Protection of the Environment<br>Operations (Waste) Regulation 2014, as the case may be.  | Section 5.5<br>Spoil Management Plan                     | Environmental<br>Coordinators<br>Site Supervisor<br>Project Engineers          |                      |  |
| CoA<br>E124 | Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste. | Section 5.5  | Environmental Manager Environmental Coordinators Site Supervisor               | Construction         |  |
| CoA<br>E125 | All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.   | Section 1.1<br>Section 5.5.1                             | Environmental Manager Environmental Coordinators Site Supervisor               | Construction         |  |
| REMM<br>WR1 | Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging  | Section 5.3  | Project Engineers Site Supervisor Sustainability Manager Environmental Manager | Construction         |  |
| REMM<br>WR2 | Waste streams would be segregated to avoid cross-<br>contamination of materials and maximise reuse and recycling<br>opportunities   | Section 5.3  | Site Supervisor Environmental Manager Environmental Coordinators               | Construction         |  |
| REMM<br>WR3 | A materials tracking system would be implemented for material transferred between construction sites  | Section 5.5.1  | Environmental Manager Environmental Coordinators Project Engineers             | Construction         |  |
| CEMF<br>1.3 | Environment and Sustainability Policy Develop effective and appropriate responses to the challenges of climate change, carbon management, resource and waste management, land use integration, customer and   | Sustainability Management<br>Plan                        | Sustainability Manager   | Pre-<br>construction |  |





|               |  |   | CONTRACTORS   |                      |
|---------------|--|---|---|----------------------|
| No            | Requirement  | How we will meet the Expectations (minimum requirements)                | Responsibility Key Contributor  | Timing               |
|               | community expectation, and heritage and biodiversity conservation.   |   |   |                      |
| CEMF<br>3.5a  | Subject to Section 3.4(b) the Principal Contractors will prepare issue-specific environmental sub plans to the CEMP which address each of the relevant environmental impacts at a particular site or stage of the project. Issue specific sub plans will include as a minimum  Waste Management  Some of these sub plans may also be informed by other environmental management documents included in the planning approval, for example the Construction Traffic Management Framework or Construction Noise and Vibration Standard. | This Sub-plan   | Environmental Manager   | Pre-<br>construction |
| CEMF<br>6.2b  | Spoil management measures will be included in regular inspections undertaken by the Contractor, and compliance records will be retained.  ii. Waste dockets for any spoil disposed of to landfill sites.   | Section 5.5.1 Element 2: Monitoring and Reporting Spoil Management Plan | Environmental Manager Environmental Coordinators Site Supervisor  | Construction         |
| CEMF<br>14.1a | The following waste objectives will apply to construction:  i. Minimise waste throughout the project life-cycle;   | Section 2.1.1   | Environmental Manager Environmental Coordinators Site Supervisor Project Engineers                        | Construction         |
|               | <ul> <li>ii. Waste management strategies for off-airport works will be implemented in accordance with the Waste Avoidance and Resource Recovery Act 2001 management hierarchy as follows:</li> <li>Avoidance of unnecessary resource consumption;</li> <li>Resource recovery (including reuse, reprocessing, recycling and energy recovery); and</li> <li>Disposal.</li> </ul>   | Section 2.1.1   | Environmental Manager Environmental Coordinators Site Supervisor Sustainability Manager Project Engineers | Construction         |





|               |   |  | CONTRACTORS                    |              |
|---------------|---|--|--------------------------------|--------------|
| No            | Requirement   | How we will meet the Expectations (minimum requirements)   | Responsibility Key Contributor | Timing       |
| CEMF<br>14.1a | iii. Consistent with the Western Sydney Airport Waste and<br>Resource Construction Environmental Management Plan,<br>waste management strategies for on-airport works will also be<br>aligned with the NSW Waste Avoidance and Resource<br>Recovery Strategy under the NSW Waste Avoidance and<br>Resource Recovery Act 2001; and   | Section 2.1.1<br>Section 5   | Environmental Manager          | Construction |
|               | iv. For on-airport works, the Sydney Metro Western Sydney Airport Waste and Resources CEMP will detail all the waste management objectives and will be consistent with the WSA Waste and Resources CEMP including all appendices to the CEMP.   | Section 2.1.1  | Environmental Manager          | Construction |
| CEMF<br>14.1b | Targets for the recovery, recycling or reuse of construction waste, and beneficial reuse of spoil will be provided by the Principal Contractor.   | Section 1.1  | Environmental Manager          | Construction |
| CEMF<br>14.2a | On-airport management of waste and resources will be achieved through the implementation of the SMWSA Waste and Resources CEMP and Principal Contractors will develop and implement a Waste Management Plan for all off-airport works. Both plans will include as a minimum:  i. The waste management mitigation measures as detailed in the planning approval documentation; | Element 4: Project Specific Requirements   | Environmental Manager          | Construction |
|               | ii. The responsibilities of key project personnel with respect to<br>the implementation of the plan;  | Section 1  | Environmental Manager          | Construction |
|               | iii. Waste management monitoring requirements;  | Element 2: Monitoring and Reporting  | Environmental Manager          | Construction |
|               | iv. A procedure for the assessment, classification, management and disposal of waste in accordance with Waste Classification Guidelines; and  | Section 1.1  Appendix C2 – Waste Classification Flowchart Appendix C3 – Waste and Recycling Management Procedure | Environmental Manager          | Construction |





|               |  |   | CONTRACTORS   |              |  |
|---------------|--|---|---|--------------|--|
| No            | Requirement  | How we will meet the Expectations (minimum requirements)                    | expectations (minimum Key Contributor   |              |  |
|               | v. Compliance record generation and management.  | Element 2: Monitoring and Reporting   | Environmental Manager   | Construction |  |
| CEMF<br>14.2b | Principal Contractors will undertake the following waste monitoring as a minimum:  i. Weekly inspections will include checking on the waste storage facilities on site; and  | Element 2: Monitoring and Reporting   | Environmental Manager Environmental Coordinators Site Supervisor                                      | Construction |  |
| CEMF<br>14.2b | ii. All waste removed from the site will be appropriately tracked from 'cradle to grave' using waste tracking dockets.   | Section 5.5.1 Element 2: Monitoring and Reporting                           | Environmental Manager Environmental Coordinators Sustainability Manger Site Supervisor Site Engineers | Construction |  |
| CEMF<br>14.2c | Principal Contractors will report all necessary waste and purchasing information to Sydney Metro as required for Sydney Metro to fulfil their WRAPP reporting requirements.  | Element 2: Monitoring and<br>Reporting<br>Sustainability Management<br>Plan | Sustainability Manager<br>Environmental Manager<br>Site Supervisor                                    | Construction |  |
| CEMF<br>14.2d | Compliance records will be retained by the Principal Contractors in relation to waste management including records of inspections and waste dockets for all waste removed from the site.   | Section 5.5.1   | Environmental Manager Site Supervisor   | Construction |  |
| CEMF<br>14.3a | The on-airport Waste and Resources CEMP and the off-airport Waste Management Plan will include the following waste management mitigation measures as well as relevant Conditions:  i. A central waste area (or areas) would be established, at which waste (including recyclables) would be stored or stockpiled. Stockpiles and bins would be appropriately labelled, managed and monitored till being removed from site; | Section 5.3.1   | Environmental Manager<br>Site Supervisor  | Construction |  |
|               | ii. All waste materials removed from the sites will be directed to an appropriately licensed waste management facility;  | Section 5.3.1   | Site Supervisor Environmental Manager   | Construction |  |





|               |   |  | CONTRACTORS   |              |
|---------------|---|--|---|--------------|
| No            | Requirement   | How we will meet the Expectations (minimum requirements)   | Responsibility Key Contributor  | Timing       |
|               |   |  | Environmental<br>Coordinators   |              |
|               | iii. The use of raw materials (noise hoarding, site fencing, etc) will be reused or shared, between sites and between construction contractors where feasible and reasonable; and   | Section 6  | Construction Manager Site Supervisor Environmental Manager                      | Construction |
| CEMF<br>14.3a | iv. Recyclable wastes, including paper at site offices, will be stored separately from other wastes.  | Section 5.4  | Site Supervisor Environmental Manager Environmental Coordinators Site Engineers | Construction |
| EPL<br>O5.1   | The licensee must prepare and provide to the EPA a Construction Waste Management Plan (CWMP) for each stage of the project or where due to project variables the CWMP requires updating. The CWMP must be provided prior to the commencement of each stage of the project and include (at a minimum):  a) the waste types and likely or estimated quantities for each waste type to be generated on the premises; b) details of the proposed sampling, testing and other methods to be used to characterise and classify waste to be generated on the premises for waste management and transport purposes; c) anticipated or known waste classification and characterisation of waste in accordance with the Waste Classification Guidelines Part 1: Classifying waste (EPA, 2014); d) details of how and where the waste is anticipated to be reused, recycled, stored or disposed of; e) the proposed methods and frequencies for conducting compliance checks under condition O5.4; and | a) Table 6 b) Appendix C2 – Waste Classification Flowchart Appendix C3 – Waste and Recycling Management Procedure c) Table 6 d) Appendix C1 – Example Waste Tracking Register for Waste Disposal Locations e) Element 3: Auditing, Review and Improvement f) Section 3.3 | Environmental Manager<br>Site Supervisor  | Construction |





|             |  |   | CONTRACTORS  |              |
|-------------|--|---|--|--------------|
| No          | Requirement  | How we will meet the Expectations (minimum requirements)  | Responsibility Key Contributor   | Timing       |
|             | f) the licensee must consider the guidance in Construction and demolition waste: a management toolkit (EPA, 2019) when preparing and implementing the CWMP.  |   |  |              |
| EPL<br>O5.2 | The licensee must keep detailed records of waste generated, received or removed from the premises that includes (at a minimum):  a) details of all waste transporters and the addresses and facility/business names of destination location(s) for all waste generated and transported off the premises for any purpose (including recycling, reuse, processing, treatment and disposal);  b) documented evidence (such as a licence) from each place of disposal that they can lawfully receive and manage (store, process, reuse, dispose) the types of waste proposed to be transported there; c) details of all waste received on the premises or transported off the premises that is subject to a Resource Recovery Order and/or Exemption under the Protection of the Environment Operations (Waste) Regulation 2014, and demonstration that the waste meets the requirements of the Order and/or Exemption; d) legible copies of all documents/records evidencing that all waste transported from the premises was taken to and received at a facility/premises that lawfully accept and process the waste as intended; e) keep legible copies of any waste tracking documentation required for the offsite transport of the waste to demonstrate the waste was tracked in accordance with NSW legislation; f) comparisons showing the proposed waste quantities and waste types documented in the CWMP against the actual waste quantities and waste types; and g) comparisons showing intended reuse, recycling or disposal locations documented in the CWMP against actual reuse, recycling and disposal locations. | a) Waste Tracking Register Section 5.5.1 b) Section 5.5 Appendix C1 – Example Waste Tracking Register for Waste Disposal Locations c) Waste Tracking Register Section 5.5.1 Section 5.3.1 d) Waste Tracking Register e) Waste Tracking Register f) Table 6 Sustainability Reports g) Table 6 Sustainability Reports | Sustainability Manager Environmental Manager Environmental Coordinators Site Engineers | Construction |





|             |   |   | CONTRACTORS                                     |              |
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| No          | Requirement   | How we will meet the Expectations (minimum requirements)                | Responsibility Key Contributor                  | Timing       |
| EPL<br>O5.3 | The CWMP must be implemented for the duration of licensed activities, and a copy of the current CWMP, historic versions of the CWMP and all records required by condition O5.2 must be kept on the premises for the duration of the licence and provided to an EPA officer upon request   | This Sub-plan   | Sustainability Manager<br>Environmental Manager | Construction |
| EPL<br>O5.4 | The licensee must conduct compliance checks pursuant to the compliance check frequencies provided in the CWMP. The compliance checks must be conducted while licenced waste activities are being undertaken to ensure that all waste is being managed, transported, reused, recycled or disposed in a lawful manner. The compliance checks must take the form of one or more of the following:  a) desktop investigations, such as: i. contacting reuse, recycling or disposal facilities directly; ii. reviewing waste disposal dockets and waste transport tracking documentation and requirements; iii. reviewing waste characterisation and classification information; iv. reviewing exemption requirements against particular loads of waste; v. reviewing environment protection licences, authorisations or approvals of facilities that receive waste generated by the project); or b) site inspections to non-licenced reuse, recycling or disposal locations; or c) any other method agreed in writing by the EPA. All compliance checks conducted under this condition must be recorded and provided to an authorised officer upon request. | Element 3: Auditing, Review and Improvement Waste to Destination Audits | Sustainability Manager<br>Environmental Manager | Construction |





|             |  | CONTRACTORS   |  |              |  |
|-------------|--|---|--|--------------|--|
| No          | Requirement  | How we will meet the Expectations (minimum requirements)                  | Responsibility Key Contributor                       | Timing       |  |
| EPL<br>O5.5 | The licensee must not cause, permit or allow any waste generated outside the licensed premises and Sydney Metro Western Sydney Airport Project including on-airport sites to be received at the licensed premises, except:  a) virgin excavated natural material; b) as expressly permitted by a condition of this licence; or c) a resource recovery order and/or resource recovery exemption under the Protection of the Environment Operations (Waste) Regulation 2014.  Note: For the purposes of condition O5.5 and condition O5.6 the "Sydney Metro Western Sydney Airport Project including on-airport sites" refers to the site within the boundary marked in orange in Figure 4 on Page 19 of the Western Sydney Airport - Airport Plan - Department of Infrastructure, Transport, Regional Development and Communications (September 2021), held on EPA Electronic File DOC22/399379-3 | On-Airport CEMP Spoil Management Sub- plan                                | Environmental Manager                                | Construction |  |
| EPL<br>O5.6 | Excavated material suitable for re-use within the premises may be transported to another part of the premises or from the Sydney Metro Western Sydney Airport Project including on-airport sites, to the premises by road  | Spoil Management Sub-<br>plan<br>Construction Traffic<br>Management Plans | Site Supervisor Environmental Manager Site Engineers | Construction |  |





## Part C Appendices

## **Appendix C1 – Example Waste Tracking Register for Waste Disposal Locations**

| Date / time | Description of material<br>(e.g. concrete, asphalt) | Place of origin | Quantity of material (tonnes) | <b>Use</b> (e.g. re-use<br>onsite, stockpiled,<br>offsite disposal) | Waste classification<br>(if offsite disposal) | Location place of reuse | Transporter and waste transport license | Facility to receive and EPL/<br>Approval Reference | Invoice no /<br>docket<br>reference | Truck Registration |
|-------------|---|-----------------|-------------------------------|---|---|-------------------------|---|--|-------------------------------------|--------------------|
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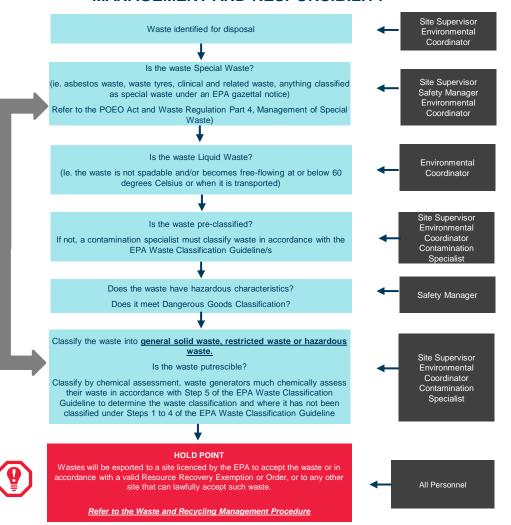




## **Appendix C2 – Waste Classification Flowchart**

#### WASTE CLASSIFICATION FLOWCHART

#### MANAGEMENT AND RESPONSIBILITY



#### MANAGEMENT

- All waste generated will be assessed, classified and managed in accordance with NSW Waste Classification Guidelines (EPA 2014).
- Where waste has been classified as VENM/ENM, on-site re-use options are to be investigated prior to off-site reuse
- Waste generated outside the premises will not be received at the premises for use, storage, treatment, processing, reprocessing, or disposal unless expressly permitted under the Environmental Protection License (EPL) or relevant Resource Exemption.
- Contaminated material is to be managed in accordance with the Contamination and Acid Sulfate Soils Management Procedure, Asbestos is to be managed in accordance with the Project WHS Management Plan.

#### **MONITORING**

 Monitoring of all waste, disposal locations and associated volumes will be carried out for the duration of the works

#### WASTE RECORDS

- A register of spoil receipt sites will be maintained, including the site or project name, location, capacity, site owner and which tier the site is classified as under the spoil reuse hierarchy.
- · All waste movements must be allocated by the haulage contractor and submitted to the site as a minimum the day before the intended waste movement.
- Each waste movement must be accompanied by a waste transfer docket which details as a minimum; the waste producer, the waste receival site, the waste classification, details of stockpiles or excavation location, the time and date of transfer, vehicle registration, quantity of material transferred and acceptance of the material at the receival site. Material tracking forms must be completed for material transferred between construction sites.
- For hazardous waste movements (if required), a consignment authorisation will be obtained from the facility which is receiving the waste, a transport certificate will be completed for each load of waste and the site will ensure the transporter is licensed or legally permitted to transport the waste.
- Waste dockets will be reviewed for content and maintained electronically on-site. The waste transfer information will be documented within the site Waste Tracking Register.
- All dockets for hazardous waste movements will be maintained for a minimum of four years.







Approved B

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Hold point





## **Appendix C3 – Waste and Recycling Management Procedure**

## WASTE AND RECYCLING MANAGEMENT PROCEDURE

#### MANAGEMENT AND RESPONSIBILITY

#### **WASTE CLASSIFICATION**

All waste (as defined in the POEO Act), including waste spoil, must be classified in accordance with the NSW Waste Classification Guidelines (EPA 2014). Waste that is not pre-classified must be sampled, analytically tested and a waste classification report prepared.



#### **HOLD POINT**

Wastes that are unable to be reused or recycled will be exported to a site licenced by the EPA to accept the waste or in accordance with a valid Resource Recovery Exemption or Order, or to any other site that can lawfully accept such waste.



Environmental

Coordinator

Environmental

Consultant

#### **RECEIVAL LOCATION SITE CHECKS**

Prior to spoil being transported off site to a location which does not hold an EPL, the receiving site landowner must confirm in writing that the site can legally accept the material and provide documentation as required by the respective Resource Recovery Exemption or Order in accordance with Section 143 of the POEO Act.

Ensure the haulage contractor has written confirmation from the receival site that the spoil classification report is accepted, and this record has been provided to CPBUI.

Spoil Manager Site Engineer Site Supervisor

#### **MATERIAL MANAGEMENT**

Potential sources of cross contamination will be identified and appropriate spoil management measures including segregation, stockpiling and direct loadout and waste tracking will be implemented in accordance with the associated Waste Classification Report and Remediation Action Plan (where relevant).

All Personnel

#### **REJECTED LOADS**

Waste that is rejected/returned due to contamination must be segregated and re-classified in

accordance with the NSW Waste Classification Guidelines (EPA 2014).

#### **WASTE RECORDS**

- A register of spoil receipt sites will be maintained, including the site or project name, location, capacity, site owner and which tier the site is classified as under the spoil reuse hierarchy.
- All waste movements must be allocated by the haulage contractor and submitted to the site as a minimum the day before the intended waste movement.
- Each waste movement must be accompanied by a waste transfer docket which details as a minimum; the waste producer, the waste receival site, the waste classification, details of stockpiles or excavation location, the time and date of transfer, vehicle registration, quantity of material transferred and acceptance of the material at the receival site. Material tracking forms must be completed for material transferred between construction sites.
- For hazardous waste movements (if required), a consignment authorisation will be obtained from the facility which is receiving the waste, a transport certificate will be completed for each load of waste and the site will ensure the transporter is licensed or legally permitted to transport the waste.
- Waste dockets will be reviewed for content and maintained electronically on-site. The waste transfer information will be documented within the site Waste Tracking Register.
- All dockets for hazardous waste movements will be maintained for a minimum of four years.

Spoil Manager Environmental Consultant

Spoil Manager Spoil Haulage Contractor Site Supervisor Site Engineer

#### REQUIREMENTS

- 100% beneficial reuse of useable spoil (inclusive of topsoil)
- 95% beneficial reuse of inert and non-hazardous construction/demolition waste, excluding spoil
- 60% of office waste is recycled or alternatively beneficially reused
- Maximise water re-use and use of non-potable water
- Accurately calculate materials brought to site, limit packaging, prioritise products made from recycled content and investigate packaging take-back arrangements.

#### **Management**

- Minimise the generation of spoil and maximise beneficial reuse through design development process. Beneficial reuse of spoil will occur in accordance with the spoil reuse hierarchy. Site-won materials will be appropriately utilised onsite.
- Landscape mounding and gabion wall features will utilise site-won materials where they meet the requirements of the Deed
- All waste generated will be assessed, classified and managed in accordance with NSW Waste Classification Guidelines (EPA 2014).
- Where waste has been classified as VENM/ENM, on-site re-use options are to be investigated prior to off-site reuse
- Spoil storage locations are to be nominated on Environmental Control Maps. Storage locations will selected to minimise noise and traffic impacts associated with spoil transport.
- Provide co-mingled bins adjacent to all general waste bins. Provide separate bins for specialist waste streams including oil, electrical and electronic waste and equipment.
- Provide sufficient on-site storage space for recyclable and general waste.
- Waste generated outside the premises will not be received at the premises for use, storage, treatment, processing, reprocessing, or disposal unless expressly permitted under the Environmental Protection License (EPL) or relevant Resource Exemption.
- Contaminated material is to be managed in accordance with the Contamination and Acid Sulfate Soils Management Procedure. Asbestos is to be managed in accordance with the Project WHS Management Plan.

#### **Monitoring and Recording**

Monitoring of all waste, disposal locations and associated volumes will be carried out for the duration of the Preparatory Works

| WASTE STREAM   | CLASSIFICATION                         |
|--|--|
| Spoil  | Determined through chemical assessment |
| Rubble, rock, sand, asphalt, road base, concrete, timber | General Solid Waste (Non-Putrescible)  |
| Green waste, recyclables, metal, wire                    | General Solid Waste (Non-Putrescible)  |
| Waste oil and NDD  | Liquid Waste                           |
| Potentially contaminated water                           | Liquid Waste or Hazardous Liquid Waste |
| Asbestos   | Special Waste                          |
| Food Waste, sanitary products                            | General Solid Waste (Putrescible)      |
| General mixed waste                                      | General Solid Waste (Non-Putrescible)  |











## **Appendix C4 – Example Waste Tracking Register**





| Date /<br>time | Description of material (e.g. concrete, asphalt) | Place of origin | Volume of<br>material<br>(tonnes) | Use (e.g. re-use onsite, stockpiled, offsite disposal) | Waste classification<br>(if offsite disposal) | Location<br>place of<br>reuse | Transporter and waste transport license | Facility to receive | Invoice no /<br>docket<br>reference |
|----------------|--|-----------------|-----------------------------------|--|---|-------------------------------|---|---------------------|-------------------------------------|
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