Western Sydney Airport

Waste and Resources
Construction Environmental Management Plan
March 2024

Western Sydney Airport

Document Control

File Name	Document Name	Revision
WSA00-WSA-00400-EN-PLN-000009	WSA Waste and Resources CEMP	5D

Revision History

Revision	Date	Description	Author	Reviewer
0	24/09/2018	Approved for Early Earthworks	WSA	S Reynolds
1	14/12/2018	Revision update to include the Experience Centre and Site Office and Material Importation	WSA	S Reynolds
2	18/12/2019	Approved for Bulk Earthworks	WSA	S Reynolds
3	26/10/2021	Approved for Terminal Works and SM, M12 and utilities woks on WSA land.	WSA	L Laughton
4	27/07/2022	Updated to reflect Commonwealth and stakeholder comments. Approve for Use.	WSA	L Laughton
5D	28/03/2024	Updated to include Stage 1 Cargo Works, Standalone facilities and Testing and Commissioning.	WSA	L. Laughton

Plan Authorisation

Position	Name	Signature	Date
Environment Manager	L Laughton		28/03/2024

Terms and Definitions

Item	Definition
ABC	Airport Building Controller
ABC Regulations	*Airports (Building Control) Regulations 1996* (Cth)
ACP	Airside Civil and Pavements
AEO	Airport Environment Officer (person appointed under the AEPR 2.01)
AEPR	*Airports (Environment Protection) Regulations 1997* (Cth)
AHD	Australian Height Datum
Airport	Western Sydney International (Nancy-Bird Walton) Airport (WSI). NB: The Airport is referred to in the Airports Act as Sydney West Airport and is also commonly known as Western Sydney Airport
Airports Act (or 'the Act')	*Airports Act 1996* (Cth)
Airport Lease	A lease for the Airport granted under section 13 of the Airports Act
Airport Plan	Means the Airport Plan for the Airport Site as determined by the Infrastructure Minister under section 96B of the Airports Act. The latest Airport Plan was determined in September 2021 and authorises Rail Development on the Airport Site.
Airport Site	The site for Sydney West Airport as defined by the Airports Act
ALC	Airport Lessee Company (the Company granted a lease over the Airport Site)
Ancillary Development	An 'ancillary development' as set out in section 96L of the Airports Act
Approver	For Condition 30 of the Airport Plan (Biodiversity Offset Delivery Plan) and any matter relating to the Biodiversity Offset Delivery Plan – the Environment Minister or an SES employee in the Environment Department For other matters – the Infrastructure Minister or an SES employee in the Infrastructure Department
Approved Plan	A Plan approved in accordance with the Airport Plan Conditions of Approval
Apron	The part of an airport used for: a. the purposes of enabling passengers to embark/disembark an aircraft; b. loading cargo onto, or unloading cargo from, aircraft; and/or c. refuelling, parking, or carrying out maintenance on aircraft
ARFFS	Aviation Rescue and Firefighting Service
AS/NZS	Australian Standard / New Zealand Standard
Associated Site	An 'associated site for Sydney West Airport' as set out in section 96L of the Airports Act
ATC	Air Traffic Control
ATCT	Air Traffic Control Tower
BEC	Bulk Earthworks Contract
Bulk Earthworks	The large-scale earthworks required to flatten the Stage 1 Airport Development Area in preparation for further construction works as described in section 6 of the Construction Plan
CASA	Civil Aviation Safety Authority
CASR	*Civil Aviation Safety Regulations 1998* (Cth)
CEMF	Contractor Environmental Management Framework
CEMP	Construction Environmental Management Plan (required under Section 3.11.2 of the Airport Plan)

Item	Definition
CIP	Cumulative Impacts Plan
CIZ	Construction Impact Zone. The part or parts of the Airport Site or an Associated Site on which Main Construction Works are planned to occur, as detailed in the Construction Plan
Condition	A condition set out in Part 3 of the Airport Plan in accordance with section 96C of the Airports Act
Construction Period	The period from the date of commencement of Main Construction Works in any part of the Airport Site until the date of commencement of Airport Operations
CSEP	Community and Stakeholder Engagement Plan (required under Condition 15 in Section 3.11.2 of the Airport Plan)
CSR	Combined Services Route
DAWE	Department of Agriculture, Water and the Environment (Cth)
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Formerly part of DPE)
DCJ	Department of Communities and Justice
DCS	Department of Customer Service
D&C	Design and Construct
DFSI	Department of Finance, Services and Innovation (Cth)
DIPNR	NSW Department of Infrastructure, Planning and Natural Resources (now DPE)
DITRDCA	Department of Infrastructure, Transport Regional Development, Communications and the Arts (Infrastructure Department) (Cth)
DPC	NSW Department of Premier and Cabinet
DPE	NSW Department of Planning, Industry and Environment (now split into DCCEEW and DPHI)
DPHI	Department of Planning Housing and Infrastructure (formerly part of DPE)
DPI	Department of Primary Industries (including Agriculture NSW, Fisheries NSW and NSW Office of Water) (now DPE)
Ecologically Sustainable Development	Using, conserving, and enhancing the community's resources so that the ecological processes on which life depends are maintained and the total quality of life now and in the future, can be increased (Council of Australian Governments, 1992)
ECM	Environmental Control Map
ECZ	Environmental Conservation Zone
EES	The Environment, Energy and Science (EES) group within the Department of Planning, Industry and Environment, formerly known as Office of Environment and Heritage
EEW	Early Earthworks
EIS	Environmental Impact Statement prepared for WSI under the EPBC Act
EMS	Environmental Management System
ETC	Enterprise Technology Contract
Environment Minister	The Minister responsible for the EPBC Act
EPA	NSW Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979* (NSW)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
ESA	Environmentally Sensitive Area
ESCP	Erosion and Sediment Control Plan

Item	Definition
ETC	Enterprise Technology Contract
EWMS	Environmental Work Method Statement
FASL	Final Airport Site Layout
GSE	Ground Support Equipment
Ha	Hectares
Infrastructure Department	The Department responsible for administering the Airports Act, currently the Australian Government Department of Infrastructure, Transport Regional Development, Communications and the Arts (DITRDCA)
Infrastructure Minister	The Minister responsible for the Airports Act from time to time
ISO 14001	AS/NZS ISO 14001:2016 Environmental Management Systems
Km	Kilometres
LCB	Landside Civil and Buildings
LDP	Land Disturbance Permit
LEP	Local Environmental Plan
M12 on Airport Works	The physical works and infrastructure, including temporary works and infrastructure which the M12 Authority, its contractors and nominees plan, investigate, design, construct, install, commission, test, accept, complete, maintain, operate or repair within the Airport Site
Main Construction Works (MWC)	Substantial physical works on a particular part of the Airport Site (including large scale vegetation clearance, bulk earthworks and the carrying out of other physical works, and the erection of buildings and structures) described in Part 3 of the Airport Plan, other than TransGrid Relocation Works or Preparatory Activities
MI	Material Importation
MTIP	Major Transport and Infrastructure Projects (Cth) - a Division of DITRDCA
Non-conformance	Failure to conform to the requirements of the Airport Plan including Approved Plans
NSWRA	NSW Reconstruction Authority
Preparatory Activities	a. day to day site and property management activities; b. site investigations, surveys (including dilapidation surveys), monitoring, and related works (e.g. geotechnical or other investigative drilling, excavation, or salvage); c. establishing construction work sites, site offices, plant and equipment, and related site mobilisation activities (including access points, access tracks and other minor access works, and safety and security measures such as fencing but excluding bulk earthworks); d. enabling preparatory activities such as: i. demolition or relocation of existing structures (including buildings, services, utilities and roads); ii. the disinterment of human remains located in grave sites identified in the European and other heritage technical report in volume 4 of the EIS; and iii. application of environmental impact mitigation measures; and e. any other activities which an Approver determines are Preparatory Activities for this definition
the Project	Western Sydney Airport – Stage 1 Airport Development
POEO Act	*Protection of the Environment Operations Act 1997* (NSW)
RAP	Remediation Action Plan
SEMF	Site Environmental Management Framework (Construction Plan, Appendix 2)
SEPP	State Environmental Planning Policy

Item	Definition
SES	Senior Executive Service
SES Officer	An SES employee under the *Public Service Act 1999* (Cth)
Stage 1 Airport Development	The Airport development described in Part 3 of the Airport Plan
Stage 1 Cargo Works	The physical things and works which the Stage 1 Cargo Works Contractor will design, supply, construct, install, produce, or complete for WSA
Standalone Facilities	The physical things and works which include Commonwealth standalone facilities which Contractors will design, supply, construct, install, produce or complete for WSA and any other associated works required by agencies or for the Stage 1 Airport Development.
Sustainability Plan	Plan required by Condition 29, Section 3.11.5 of the Airport Plan
Sydney West Airport	The Airport. NB: this is the name used in the Act. The Airport is known as Western Sydney International (Nancy-Bird Walton) Airport, or, more commonly, Western Sydney International
TfNSW	Transport for New South Wales
TSS	Terminal and Specialty Services
WSA	WSA Co Limited (ACN 618 989 272), the entity responsible for constructing and operating the Airport in accordance with the Airport Plan. For the purposes of the Airports Act, WSA is the "Airport Lessee Company" for WSI.
WSI	Western Sydney International (Nancy Bird Walton) Airport. The Airport. NB: Under the Airports Act, the Airport is referred to as Sydney West Airport
ACM	Asbestos Containing Material
BBM	Bituminous Bound Material
ENM	Excavated Natural Material
SCC	Specific Contaminant Concentrations
TCLP	Toxicity Characteristics Leaching Procedure
VENM	Virgin Excavated Natural Material
WARR Act	*Waste Avoidance and Resource Recovery Act 2001* (NSW)

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1. Introduction

1.1 Background/Context

This Waste and Resources Construction Environmental Management Plan (Waste and Resources CEMP) (this Plan) has been prepared to satisfy the requirements of the Waste and Resources CEMP set out in the Conditions for the Stage 1 Development of the Western Sydney International (Nancy-Bird Walton) (**WSI**) Airport detailed in Section 3.11.2 of the Airport Plan. Specifically, Section 3.11.2 Condition 13(1) of the Airport Plan requires that a Waste and Resources CEMP be approved under the Airport Plan prior to the commencement of Main Construction Works.

This Waste and Resources CEMP provides the management approach and requirements (including environmental mitigation measures, controls, monitoring and reporting) for managing waste and resources during construction of the Stage 1 Airport Development. This Plan forms one of nine CEMPs which are collectively covered by the WSA Site Environmental Management Framework (SEMF). To ensure the environmental resources, responsibilities and management measures are implemented during the construction activities, the SEMF is contained within the Construction Plan (Appendix 2). The implementation of the Construction Plan and the SEMF are aligned with Project level management plans including the Community and Stakeholder Engagement Plan (CSEP) and the Sustainability Plan as illustrated in Figure 1.

The Construction Plan, including the SEMF, and nine CEMPs provide the environmental management approach and requirements and therefore should not be read in isolation to each other due to interconnecting management outcomes and objectives. For the Waste and Resources CEMP, it is considered that the following management plan linkages can be made:

- Biodiversity CEMP – The removal / stripping of topsoils and vegetation will require specific management and disposal of identified noxious weed species. This Waste and Resources CEMP provides mitigation measures and controls with regards to the management and disposal of green waste, with a cross-reference provided to the Biodiversity CEMP for the specific management of noxious weed species.
- Soil and Water CEMP – Soil and water quality have the potential to be impacted if waste and resource management is ineffective, specifically regarding waste tracking, contamination management and the potential associated water quality impacts from site run-off.
- Visual and landscape CEMP – The management of waste (and to a lesser extent resources) is a direct link to the management of visual and landscape features with regards to the general visual amenity and associated impacts if not managed correctly. Furthermore, it is noted that one of the proposed mitigation measures to be implemented as part of the Illegal Dumping Prevention Strategy (Appendix B) is the use of lighting as a deterrent. Any use of lighting should be undertaken in a manner so as not to impact the visual amenity of potentially sensitive receptors and should be managed in accordance with the Visual and Landscape CEMP.
- Community and Stakeholder Engagement Plan (CSEP) – It is anticipated that the surrounding community and stakeholders will be sensitive to waste generation, resource management and associated impacts, including the impacts of traffic generation / management and odours.
- Sustainability Plan – Maximising the beneficial reuse of potential waste products and minimisation of waste disposal off-site and resource usage are key drivers for both the sustainability and the waste and resource management objectives and targets. Design for the Airport are based on designing out waste and optimising the in-built efficiency of the building's structure, materials, and services. This linkage with the WSA Sustainability Plan extends to IS Rating discharge credit Waste Was-1, Was-2 & Was-3, where compliance with this CEMP will ensure the project will meet credit requirements.

Where relevant, linkages to other CEMPs and management objectives have been included in the risk assessment and the environmental control measures (Section 5.3 and Section 6 respectively).

Figure 1 highlights relationships and linkages of this Waste and Resources CEMP with other CEMPs and Plans, including key cross-referencing to the Airport Plan and Environmental Impact Statement (EIS) requirements.

Table 1: Waste and Resources CEMP relationship with other Plans

CEMP or Plan	Airport Plan Condition (3.11.2)	EIS Chapter 28 Table: Management area	EIS Chapter 28 Table: Mitigation measures
Aboriginal Cultural Heritage	11	28-12	28-13
Air Quality	10	28-10	28-11
Biodiversity	7	28-04	28-05
Community and Stakeholder Engagement	15	28-20	28-21
European and other Heritage	12	28-14	28-15
Noise and Vibration	6	28-02	28-03
Soil and Water	8	28-06	28-07
Sustainability	29	28-37	28-38
Traffic and Access	9	28-08	28-09
Visual and Landscape	14	28-18	28-19
Waste and Resources (this Plan)	13	28-16	28-17

Key
Moderate to high relevance to this CEMP
Some relevance to this CEMP

The review and document control process for this Plan are described further in Section 10 of the SEMF.

The context of this Plan in relation to the WSA environmental management system (EMS) is presented in Figure 1.

1.2 Document Purpose

The purpose of this Plan is to avoid/mitigate waste and resources impacts and provide the foundation for the management of all waste and resources impacts for all construction activities as per the approved Construction Plan; in accordance with best practice and legal requirements (including environmental mitigation measures, controls, monitoring and reporting). Objectives, targets and performance criteria are set out in Section 3 of this CEMP.

This Plan details the waste and resource management requirements that must be satisfied to demonstrate compliance with the Conditions as set out in Condition 13 of Section 3.11.2 of the Airport Plan for the construction of the Stage 1 Airport Development.

Legal and other requirements are identified and maintained in a register within the SEMF (refer SEMF Appendix L). Specific waste and resources mitigation measures are included within this CEMP (refer Section 6) and are derived from the EIS (refer to Section 4.5) and are required to be satisfied as well as assessed through risk assessment processes (refer Section 5.3).

Section 6 outlines how mitigation measures will be implemented, by who and at which phase of construction. Implementation of these measures is ensured through a program or work activities, monitoring, training, competence, inspection, auditing and reporting actions (refer Sections 9 and 10), with the responsibilities for implementation identified in Section 8. Continual improvement processes in relation to compliance with regulatory requirements are detailed in the SEMF Section 9.2.

In summary, this Plan sets out to achieve the following:

- Provision of details for the management and mitigation measures to be implemented, including timing and responsibilities;
- Ensuring the commitments of the Conditions (as set out in the Airport Plan) and regulatory requirements are met and satisfied by both WSA and contractors;

- Provision of process for monitoring implementation, reporting, and auditing of waste and resource related management and compliance related issues;
- Commitment to meeting the requirements of AS/NZS ISO 14001:2016 Environmental Management Systems including the need for continual improvement;
- Provision of a process to be implemented for the management of complaints, for stakeholder engagement, and for the management of emerging environmental issues as they arise; and
- Provision of a system including procedures, plans and documentation for implementation by WSA personnel and contractors to enable Project completion in accordance with the environmental requirements.

Effective implementation of this plan will assist WSA and relevant contractors to achieve compliance with necessary environmental regulatory and policy requirements in a systematic manner with an outcome of continual environmental management performance.

1.3 WSA EMS Overview

WSA operates in general accordance with AS/NZS ISO 14001:2016 – Environmental management systems. A copy of the WSA Environmental Policy is provided in Appendix H of the SEMF.

The Stage 1 Airport Development will be undertaken in accordance with the Construction Plan including the SEMF and the associated CEMPs (including this Plan).

The SEMF forms an appendix to the Construction Plan and is the overarching management plan for the implementation of the nine CEMPs. It provides a structured and systematic approach to environmental management and provides an expectation and guidance with regards to environmental management for the construction of the Stage 1 Airport Development.

The structure of the environmental management system (EMS) for the Project is shown in Figure 1.

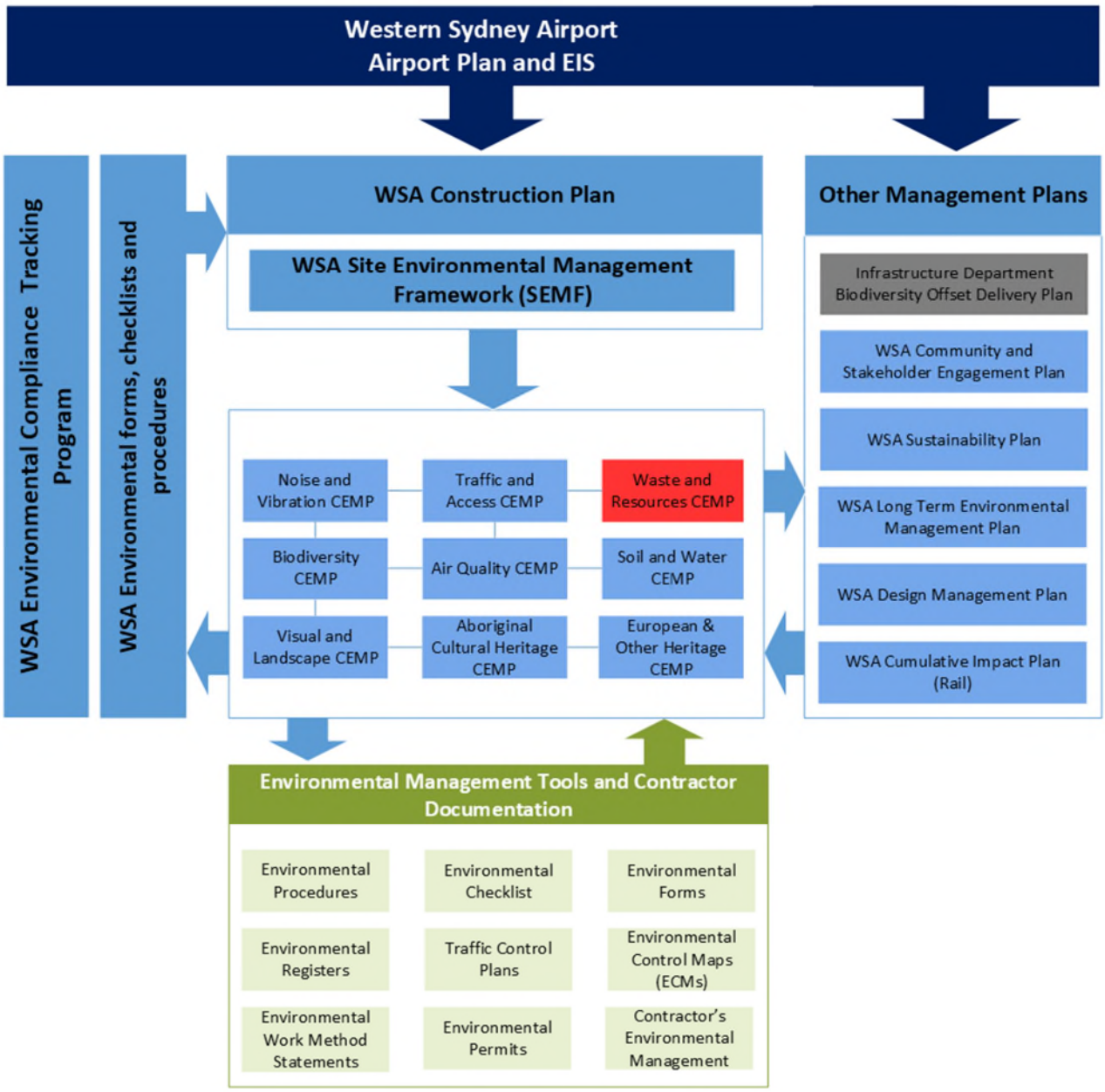

Figure 1: WSA EMS and CEMP Context

1.4 Consultation Requirements of this Plan

Airport Plan Condition 35 outlines the consultation requirements during the preparation of this CEMP and requires consultation with NSW Government agencies as specified by the NSW Department of Premier and Cabinet (DPC) as well as the NSW Department of Planning and Environment (DPE) for specific CEMPs. NSW Government agencies specified by DPC for consultation on this Waste and Resources CEMP include the NSW Environment Protection Authority (EPA), the NSW Department of Finance, Services and Innovation Waste Services (DFSI Waste Services), Penrith and Liverpool City Councils.

Further, Airport Plan Condition 13(3) requires that this CEMP to consider Table 28-16 of the EIS which states the CEMP should also be prepared in consultation with the NSW EPA and relevant local councils.

Consultation has been completed during the development of this CEMP during the review and update of Revision 0 and 1 in 2018, Revision 2 in 2019, Revision 3 in 2021, Revision 4 in 2022 and Revision 5 in 2024.

A summary of the stakeholder and government agency consultation completed and used to inform the review and finalisation of Revision 5 is presented in **Table 2**.

Consultation will continue with government agencies and other relevant stakeholders throughout the Project where there is a change to a CEMP. The outcomes of this consultation will be documented in subsequent revisions of the relevant CEMPs, with details of such consultation included in the applicable document.

1.4.1 Consultation to Inform Revision 5

A Community and Stakeholder Engagement Plan (CSEP) outlining the process for engaging with stakeholders was prepared by the WSA Community and Engagement team. The CSEP and a scoping document outlining the works in the Construction Plan and potential modification of the CEMPs was provided to the stakeholders as required by the Airport Plan Conditions.

Details of the construction phases were described in the correspondence to provide context to stakeholders on the level of impact that would result from the next phase of construction activities. Upcoming Commercial and Commonwealth Development phase of construction captured in Revision 5 of the CEMPs include a Cargo facility and standalone facilities. On 04 March 2024 stakeholders were provided with the draft Construction Plan, the nine draft CEMPs and the CSEP to review and were invited to provide comment. A summary of the consultation is provided in **Table 2**.

Table 2: Waste and Resources CEMP Consultation

Activity	Date	Invitees	Summary
Consultation Summary			
Briefing presentation for stakeholders	20 February 2024	• Aboriginal Affairs NSW • Aerotropolis Community Commissioner • Department of Infrastructure, Transport, Regional Development, Communications and the Arts • NSW Department of Climate Change, Energy, the Environment and Water • Commonwealth Department of Climate Change, Energy, the Environment and Water • Department of Communities and Justice • Department of Customer Service (Building Commission, Fair Trading, SafeWork) • NSW Department of Planning, Housing and Infrastructure (Valuer General, Property, Western Parkland City Authority). • NSW Health (Health Infrastructure, South Western Sydney and Nepean Blue Mountains Local Health Districts) • NSW Reconstruction Authority (NSWRA) • NSW Rural Fire Services • Liverpool City Council • Penrith City Council • Sydney Metro • Transport for NSW • The Cabinet Office (Part of NSW Department of Premier and Cabinet)	Stakeholders who joined the meeting were taken through a presentation outlining updates to the Construction Plan, CEMP and CSEP.
CEMPs provided to stakeholders for comment	04 March 2024		

1.5 Certification and Approval

This Waste and Resources CEMP has been reviewed and approved for issue by the WSA Environment Manager prior to submission to the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the Infrastructure Department), for approval in accordance with the EIS Table 28-16 (refer **Table 9**).

1.6 Distribution

All WSA personnel and contractors will have access to this Waste and Resources CEMP via the Project document control management system. The Approved Plan must be published on WSA's website within one month of being approved and be available until the end of the Construction Period. An electronic copy can be found on the Project website - https://westernsydney.com.au.

This document is uncontrolled when printed. One controlled hard copy will be maintained by the Quality Manager at the Project office.

2. Scope of Works

The Construction Plan details the construction staging of the Stage 1 Airport Development.

The delivery of the Stage 1 Airport Development will be through a packaging strategy with a wide variety of package sizes, risk profiles and contracting entities. Each package (scope of work allocated to one contractor) will have different levels of environmental risk and environmental obligations, depending on the scope of works, location of works and sensitivity of the receiving environment and cultural heritage issues and relevant statutory requirements and obligations.

The Stage 1 Airport Development of the Project comprises the following key features as described in the Construction Plan (which is consistent with the Airport Plan and EIS Chapter 5):

- Site preparation
- Utilities
- Ancillary developments
- Terminal
- Airside
- Ground transport
- Other building activities
- Aviation support facilities

Details of the Project construction packages, activities, staging and programming including the phases of works for each package are described in Section 3 and Section 6 of the Construction Plan (WSA00-WSA-00000-CN-PLN-000001) as required by the Airport Plan Condition 1(5).

This Plan applies to all phases of works as described in Section 6 of the Construction Plan.

A variation to this Plan will be submitted before work other than Preparatory Activities is undertaken on any other phases of works.

3. Objectives and Targets

3.1 Objectives

The key objective of this Plan is to ensure that impacts from waste and resources are managed by maximising waste avoidance, and active reduction, reuse and recycling within the scope permitted by the planning approval.

To achieve this objective, the following will be undertaken:

- Ensure appropriate measures are implemented to address the mitigation measures detailed in Table 28-16 and Table 28-17 in Chapter 28 the EIS;
- Minimise waste production and ensure that all waste material generated on site is handled in a responsible manner, and in accordance with legislative requirements;
- Maximise efficient use of resources including minimising resource use and maximising recovery and recycling;
- Prevent pollution associated with the management and disposal of waste material;
- Minimise the risk of illegal dumping on the Airport Site;
- Increase employee and subcontractor awareness of their obligations about waste management and recycling opportunities;
- Ensure the implementation of appropriate environmental controls and procedures; and
- Ensure appropriate measures are implemented to comply with all relevant legislation and other requirements as described in Section 4 of this Plan.

3.2 Targets and Performance Criteria

Targets and performance criteria have been established for the management of waste and resources during the project, which have been, derived from the framework and performance criteria identified in the EIS, Table 28-16, as presented in **Table 3**.

Table 3: Waste and Resources Objectives, Targets and Performance Criteria

Objective	Target	Performance criteria	Document Reference
Minimising waste production and ensure that all waste material generated on site is handled in a responsible manner, and in accordance with legislative requirements	Effective application of the waste management hierarchy (refer to Section 7.8) across construction activities.	Compliance with the approved waste and resources CEMP. Compliance with the approved Sustainability Plan.	Weekly environmental inspection reports Monthly reporting Incident and non-conformance reporting Audit reporting Annual Compliance Report
Maximise efficient use of resources including minimising resource use and maximising recovery and recycling	Effective application of the waste management hierarchy (refer to Section 7.8) across construction activities. Achieve the waste re-use/recycling targets in Table 4.	Compliance with the approved waste and resources CEMP. Compliance with the approved Sustainability Plan.	Weekly environmental inspection reports monthly reporting Incident and non-conformance reporting Audit reporting Annual Compliance Report
Prevent pollution associated with the management and disposal of waste material	Dispose of waste materials in accordance with relevant legislative requirements (NSW EPA Waste Classification Guidelines, 2014).	Effective application of the waste management hierarchy across construction activities.	Weekly environmental inspection reports monthly reporting Incident and non-conformance reporting Audit reporting Annual Compliance Report

Objective	Target	Performance criteria	Document Reference
Minimise the risk of illegal dumping on the Airport Site	No illegal dumping on the airport site.	Effective implementation of the illegal dumping prevention strategy (Appendix B) Report all illegal dumping on the Airport Site.	Weekly environmental inspection reports Monthly reporting
Increase employee and subcontractor awareness of their obligations about waste management and recycling opportunities	All employees to receive training/induction for all the waste and resources CEMP.	Employees and contractors to complete waste and resources training.	Induction and training package Training records Audit reporting
Ensure the implementation of appropriate environmental controls and procedures	Effective application of the waste and resources management (refer to Section 7) across construction activities.	Compliance with the approved CEMP.	Weekly environmental inspection reports Monthly reporting Incident and non-conformance reporting Audit reporting Annual Compliance Report

The above performance criteria in **Table 3** have been set to provide a benchmark performance objective to which WSA will endeavour to achieve. Failure to achieve the targets will not be considered a non-conformance, however, will prompt internal review of environmental management and consideration of potential improvement opportunities. Targets specific to construction waste streams have been set out in **Table 4**.

Table 4: Construction Waste Stream Targets

Construction Activity	Waste Type	Waste Classification	Disposal Method	Reuse / Recycle Target
Earthworks	Surplus spoil	VENM / ENM	Re-use on site	100%
			Off-site re-use	
	Contaminated soil	Various - As classified under NSW EPA 2014 Waste Classification Guidelines and listed in Table 25-2 of EIS	Onsite remediation to achieve re-use on site or reduced waste classification	0%
			Offsite disposal to licensed waste facility	
Clearing and grubbing	Vegetation	Greenwaste / General solid waste (putrescible)	Use on site in erosion and sediment control and landscaping	100%
			Offsite use of merchant timber	
			Offsite disposal in accordance with the EPA Raw Mulch Exemption / Order 2016	
			Fauna habitat restoration on site or at an approved location off-site	
Demolition	Concrete and brick	General solid waste (non-putrescible)	Crushed and re-used on site where practical (for road stabilisation etc.)	80 - 90%
			Disposal to concrete recycler	
	Steel	General solid waste (non-putrescible)	Disposal to steel / metal recycler	

Construction Activity	Waste Type	Waste Classification	Disposal Method	Reuse / Recycle Target
Building construction material	Surplus construction materials (steel, PVC, Wood etc.)	General solid waste (non-putrescible)	Disposal to recycling facility	80%
Dewatering	Surface water	Liquid waste	Use on site for dust mitigation and soil conditioning	50%
			Discharge off site in accordance with Project approvals	50%
Maintenance	Liquid waste, used oils, lubes etc.	Liquid waste	Disposal off-site to a licensed recycling facility; liquid waste that cannot be recycled will be disposed to landfill	80%
Administration	Office Waste	General solid waste (non-putrescible)	Disposal of paper, cardboard, commingled, organics and soft plastic at recycling facilities	60%

4. Environmental Legal and Other Requirements

Relevant environmental legislation and other requirements are identified below.

4.1 Relevant Legislation and Guidelines

As the Western Sydney Airport is to be developed under the Airport Plan determined under the Commonwealth *Airports Act 1996* (Airports Act), some state laws will not be applicable to the Project (refer s112 Airports Act). Where state law is applicable, this plan will set out the relevant applicable state legislation and requirements and demonstrate how compliance with those laws including obtaining relevant permits will be achieved. Where state laws are not applicable, there may nonetheless be a requirement to have regard to those laws, for example, through mitigation measures to be incorporated in CEMPs to satisfy conditions under the Airport Plan.

4.1.1 Legislation

Relevant environmental legislation and regulations to this Plan are summarised in **Table 5**. Further legislative details can be found in Section 3.2 of the SEMF and its Appendix L – Legal and other Requirements Register.

Table 5: Principal Environmental Legislation and Relevance

Legislation or Regulation	Relevance	CEMP Compliance Provisions
Commonwealth		
Airports Act 1996 (Airports Act)	The Act and AEPRs set out the framework for the regulation and management of activities at airports that could have potential to cause environmental harm. This includes offences related to environmental harm, environmental management standards, monitoring and incident response requirements. The Airport Plan prepared under the Airports Act covers several environmental matters and details specific measures to be carried out for the purposes of preventing, controlling or reducing the environmental impact associated with the airport. Criminal offences may be applicable if these measures are not complied with.	This CEMP forms part of the overall WSA EMS which has as a target of full compliance with the Airport Plan. Relevant mechanisms within this CEMP that will contribute to this include but are not limited to: • Section 3.1 – Objectives • Section 4.3 – Airport Plan Conditions • Section 4.4 – EIS Requirements • Section 5.3 – Risk Assessment • Section 6 – Environmental Control Measures • Section 8 – Environmental Roles and Responsibilities • Section 9 – Environmental Inspection, Monitoring, Auditing and Reporting • Section 9.5 – Review of Approved Plans • Section 9.6 – Environmental incidents, and Complaints Management
Airports (Building Control) Regulations 1996	Any conditions imposed on the ABC and ALC on their consents must be satisfied by the applicant. These conditions are additional to any requirements identified under the CEMPs.	This CEMP
Airports (Environment Protection) Regulations 1997 (AEPR)	Imposes a general duty to prevent or minimise environmental pollution once an airport lease is granted. Promotes improved environmental management practices at airports. Includes provisions setting out pollution definitions in addition to monitoring and reporting requirements specific to waste.	Refer to commentary on the Airports Act above.

Legislation or Regulation	Relevance	CEMP Compliance Provisions
Hazardous Waste (Regulation of Imports and Exports) Act 1989	Implements Australian Government obligations under the Basel Convention and prohibits the export and import of hazardous waste without a permit. A permit may be obtained to export hazardous waste where it can be shown that the waste would be managed in an environmentally sound manner in the country of import.	Refer to Section 7 with regards to the management of waste materials going off site and the requirements for materials being imported onto site.
National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998	Assist in achieving the desired environmental outcomes by providing a basis for ensuring that controlled wastes which are to be moved between States and Territories are properly identified, transported, and otherwise handled in ways which are consistent with environmentally sound practices for the management of these wastes.	Measure as disposal outside NSW is mentioned in 7.4 Waste Disposal.
National Greenhouse and Energy Reporting Act 2007	An airport lessee company is required to register and report its operational greenhouse gas emissions attributable to the activities over which it has operational control. This is because it is expected that its emissions will exceed relevant thresholds. This may also apply to the construction contractor and other contractors or users of the airport (e.g. airlines).	The requirements of this Act were considered in the development of the WSA Sustainability Plan.
Recycling and Waste Reduction Act 2020	Ensures only waste glass, plastic, tyres and paper that have been processed to acceptable level can be exported. It is aimed at preventing these materials from being dumped overseas, reducing harm to the environment and human health.	Refer to Section 7.4 Waste Disposal. with regards to the management of waste materials going off site
Work Health and Safety Act 2011 (Commonwealth and NSW)	Imposes specific requirements in relation to hazardous materials including asbestos that would be applicable to WSA and contractors.	Refer to Section 7 regarding the management of asbestos waste.
NSW (NSW legislative requirements will be applicable to any waste leaving the Airport Site)		
Biosecurity Act 2015 (Biosecurity Act)	The Biosecurity Act outlines biosecurity risks and impacts including impacts associated with weeds. The Act introduces the concept of Priority Weeds that should be prevented, managed, controlled or eradicated within regions.	Refer to mitigation measures and controls detailed in Section 6 with regards to management of weeds associated with waste management.
Contaminated Land Management Act 1997	Provides for the investigation and remediation of contaminated land considered to pose a significant risk to human health or the environment.	The requirements of this Act were considered in the development of the Remediation Action Plan.
Environmentally Hazardous Chemicals Act 1985	Provides for control of the effect on the environment of chemicals and chemical wastes.	Refer to Section 6 for environmental mitigation measures and controls.

Legislation or Regulation	Relevance	CEMP Compliance Provisions
Environmental Planning and Assessment Act 1979 (EP&A Act)	Objects of the Act include the encouragement of proper management and conservation of natural and artificial resources and the promotion of the orderly and economic use and development of land in NSW. The EP&A Act also provides for the making of environmental planning instruments including State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs), which include land use controls, such as development standards applicable to the land within the area covered by each instrument.	This Project has been authorised under the Airports Act; however, a range of matters arising from the EP&A Act have been considered - Refer to Section 6 for environmental mitigation measures and controls.
Liverpool Local Environmental Plan 2008 (Liverpool LEP)	The Liverpool LEP provides local environmental planning controls and standards for land in the Liverpool LGA in accordance with the standard environmental planning instrument under section 3.20 of the EPA Act.	• Section 6 – Environmental Control Measures
Penrith Local Environmental Plan 2010 (Penrith LEP)	The Penrith LEP provides local environmental planning controls and standards for land in the Penrith LGA in accordance with the standard environmental planning instrument under section 3.20 of the EPA Act.	• Section 6 – Environmental Control Measures
Protection of the Environment Operations Act 1997 (POEO Act) and the Protection of the Environment Operations (General) Regulations 2022	The POEO Act provides a range of controls about waste management requirements including the means of processing, handling, moving, storage and disposal of materials. The POEO Act also provides classification of offences as Tier 1, 2 or 3 which have relevance to pollution and waste offences, with prescribed penalty notice amounts provided in the POEO (General) Regulations.	Refer to Section 6 for environmental mitigation measures and controls.
Protection of the Environment Operations (Waste) Regulations 2014	Sets out obligations that would apply to waste managers, consigners, transporters and receivers dealing with waste coming from the Airport Site. The main provisions of the Regulation relate to the payment of a waste levy by licensed waste receivers, the requirements to track the transportation and disposal of certain types of waste, and specific requirements regarding the transportation and management of asbestos waste.	Refer to Section 6 for environmental mitigation measures and controls.
State Environmental Planning Policy (Precincts – Western Parkland City)	The SEPP was made in accordance with division 3.3 of the EP&A Act. Chapter 4 provides planning controls for development within the Western Sydney Aerotropolis (the land immediately surrounding WSI). The SEPP overrides any LEP provisions that apply to that land.	• Section 6 – Environmental Control Measures

Legislation or Regulation	Relevance	CEMP Compliance Provisions
Waste Avoidance and Resource Recovery Act 2001 (WARR Act)	The overarching waste management legislation in NSW. The objectives of the Act include encouraging the most efficient use of resources, reducing environmental harm and ensuring resource management decisions are made against a hierarchy that gives preference to waste avoidance and resource recovery. The main provisions of the Act relate to the preparation of waste strategies and extended producer responsibility schemes. The current statutory waste strategy is the NSW Waste Avoidance and Resource Recovery Strategy 2014–21 (EPA 2014a). The waste strategy is explained in Section 5.	Refer to Section 7 for waste and resource management.
Work Health and Safety Act 2011 & Work Health and Safety Regulation 2017	The Work Health and Safety Act 2011 (NSW) provides a framework to protect the health, safety and welfare of all workers and others in relation to NSW workplaces and work activities. The Work Health and Safety Regulation 2017 set out specific requirements for hazards and risks, such as noise, machinery, and manual handling.	Work Health and Safety Plan

4.1.2 Guidelines and Standards

Guidelines and standards that are relevant to waste and resource management and this Plan are summarised in **Table 6**.

Table 6: Relevant Guidelines and Standards

Guidelines and Standards	Relevance to this CEMP
National Waste Policy – Less waste, more resources	Section 7 - Waste and resources management
Australian Code for the Transport of Dangerous Goods by Road and Rail	Section 7 - Waste and resources management
NSW Waste Avoidance and Resource Recovery Strategy 2014-21	Section 7.8 - Waste management hierarchy
NSW Waste Classification Guidelines	Section 7.1 - Classification of waste streams
National Environmental Protection (Assessment of Site Contamination) Measure 2013	Section 7.4 - Waste disposal
Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard, Revised Edition (World Resources Institute / World Business Council for Sustainable Development, 2004)	Section 7.5 - Energy conservation
National Greenhouse and Energy Reporting (Measurement) Determination 2008 (Department of Environment, 2014a)	WSA Sustainability Plan
National Greenhouse and Energy Reporting System Measurement: Technical Guidelines for the Estimation of Greenhouse Gas Emissions by Facilities in Australia (Department of the Environment, 2014b);	WSA Sustainability Plan
National Greenhouse Accounts Factors (Department of the Environment, 2014c)	WSA Sustainability Plan

Guidelines and Standards	Relevance to this CEMP
Waste Classification Guidelines (Environment Protection Authority, 2014)	Section 7.1 - Classification of waste streams
Western Sydney Aerotropolis Development Control Plan 2022 Phase 2	Section 4.1.1 - Legislation

4.2 Approvals and other Specifications

Approvals relevant to waste and resources management and this Plan are summarised in **Table 7**.

Table 7: Approvals Relevant to Waste and Resources Management

Approvals	Relevance to this CEMP
Western Sydney Airport Plan	Provides the Conditions of Approval relevant to waste and resources management during construction.
Western Sydney Airport Environmental Impact Statement	The requirements of waste and resources management to be considered and addressed during the construction phase of the Stage specifically EIS Table 28-16.

In addition to the above approvals, the following specifications are relevant to waste and resources management and this Plan:

- WSA Functional Specifications;
- WSA Sustainability Plan;
- WSA Remediation Action Plan;
- WSA CSEP;
- WSA Construction Plan, including the SEMF and
- WSA Long Term Environmental Management Plan

4.3 Airport Plan Conditions

Conditions relevant to waste and resource management during construction of the Stage 1 Airport Development are provided in Section 3.11.2 of the Airport Plan and summarised in **Table 8**. Compliance with the Airport Plan conditions is a statutory requirement and as such, failure to comply may constitute a criminal offence liable to criminal prosecution under the Airports Act.

Table 8: Airport Plan Conditions Relevant to Waste and Resource Management

Condition No.	Condition	Timing	Responsibility	Document reference
1.4	The Site Occupier must ensure that no CEMP is inconsistent with the approved Construction Plan	Ongoing	WSA	This CEMP Construction Plan
1.5	The approved Construction Plan may provide for Main Construction Works to be carried out in phases that commence at different times for different parts of the Airport Site or an Associated Site. If it does, the Site Occupier may prepare a CEMP in relation to one or more phases, and the criteria for approval of such a CEMP are taken to exclude any matter irrelevant to the phases for which approval is sought. A variation of the CEMP must be	Ongoing	WSA	This CEMP Construction Plan

Condition No.	Condition	Timing	Responsibility	Document reference
	submitted for approval in accordance with condition 49 (Variation of Approved Plans) prior to commencement of any new phase.			
5.3	In carrying out a Preparatory Activity for the Airport Stage 1 Development, the Site Occupier must: a) implement any plan approved in accordance with sub condition (1) or (2), except to the extent that the plan is inconsistent with any subsequently approved CEMP or the approved Construction Plan; and b) not act inconsistently with any approved CEMP or the approved Construction Plan.	Ongoing	WSA	The SEMF
13.1	The Site Occupier must not: a) commence Main Construction Works until a Waste and Resources CEMP has been prepared and approved in accordance with this condition; or b) carry out any development described in Part 3 of the Airport Plan inconsistently with the approved Waste and Resources CEMP.	Prior to Main Construction Works	WSA	This CEMP
13.2	The Site Occupier must: a) prepare, and b) submit to an Approver for approval; a Waste and Resources CEMP in relation to the carrying out of the developments which are part of the Airport Stage 1 Development.	Prior to Main Construction Works	WSA	This CEMP
13.3	The criteria for approval of the Waste and Resources CEMP are that an Approver is satisfied that: a) in preparing the Waste and Resources CEMP, the Site Occupier has considered Table 28-16 in Chapter 28 of the EIS; and b) the Waste and Resources CEMP complies with Table 28-17 in Chapter 28 of the EIS, and is otherwise appropriate.	Prior to Main Construction Works	Approver	This CEMP
Issue – Illegal Dumping in Table 25-8 in Section 25-7 of the EIS	An illegal dumping prevention strategy will be developed as part of the Waste and Resources CEMP. The strategy will outline measures to be undertaken to minimise the risk of illegal dumping on the Airport Site and will be developed in consultation with the NSW Environment Protection Authority and relevant local councils.	Prior to Main Construction Works	WSA	Appendix B
35	An Approver must not approve a plan referred to in Chapter 28 of the EIS unless he or she is satisfied that the Plan Owner:	Ongoing	Approver	Section 1.4

Condition No.	Condition	Timing	Responsibility	Document reference
	(a) in preparing the plan, has consulted with any NSW Government agencies specified by the NSW Department of Premier and Cabinet; and … (b) has provided: I the Approver; and II each consulted agency, with an explanation of how any responses have been addressed.			
42	Cumulative Impacts Plan (1) The Rail Authority must not commence Rail Construction Works until a Cumulative Impacts Plan has been approved in accordance with this condition. (2) The ALC must: (a) prepare; and (b) submit to an Approver for approval; a Cumulative Impacts Plan in relation to cumulative impacts arising from the concurrent construction of the Airport Stage 1 Development and the Rail Development. (3) The criteria for approval of the Cumulative Impacts Plan are that an Approver is satisfied that the Cumulative Impacts Plan: (a) sets out: (i) co-ordination and consultation requirements between the following stakeholders as relevant to manage the interface of projects under construction at the same time: the ALC, the Rail Authority, Transport for NSW, Western Parkland City Authority, Sydney Water, emergency service providers and utility providers; (ii) the responsibility for management of the impacts set out in the Cumulative Impacts Plan; (iii) the relevant environmental management framework relating to construction of the Airport Stage 1 Development and the Rail Development; and (iv) the process for proactively identifying and managing cumulative impacts; (b) has been prepared in consultation with the Rail Authority; and (c) is otherwise appropriate. (4) Each of the Rail Authority and the ALC must not act inconsistently with the approved Cumulative Impacts Plan.	Prior to rail construction works occurring	WSA and the Approver	Cumulative Impacts Plan (Rail) - WSA00-WSA-00400-EN-PLN-000013
45 to 50	Set out requirements in relation to informing other parties of conditions, keeping records, publishing reports, independent audits,	Ongoing	WSA and Approver	This CEMP WSA Sustainability Plan

Condition No.	Condition	Timing	Responsibility	Document reference
	variation to approved plans and publication of approved plans			

4.4 EIS Requirements

The requirements of waste and resource management to be considered and addressed during the construction phase of the Stage 1 Airport Development are included in the EIS, Table 28-16 and 28-17.

A summary of these requirements and how they have been addressed in this Waste and Resources CEMP is presented in **Table 9**.

Table 9: Summary of EIS Waste and Resource Management Requirements

EIS Reference	Topic	Summary	Waste and Resources CEMP Reference
Table 28-16	Performance criteria	The performance criteria for waste management are: • Compliance with the approved Waste and Resources CEMP • Compliance with the approved Sustainability Plan • Waste management practices do not place burden on local and regional waste services • Effective application of the waste management hierarchy across construction activities	Section 3 – Objectives and Targets Section 7 - Waste and resources management. Section 7.8 – Waste management hierarchy
Table 28-16	Implementation framework	The Waste and Resources CEMP will be approved prior to commencement of Main Construction Works for the proposed airport. The Waste and Resources CEMP will collate measures to mitigate and control waste management activities including cross-references to other environmental management plans where they are relevant. The Waste and Resources CEMP will as a minimum:	Section 6–Environmental control measures
		Detail the management and mitigation measures to be implemented, including those outlined in Table 28-17 (of the EIS)	Section 4.4 - EIS requirements
		Describe the process for managing complaints, stakeholder engagement, and emerging environmental management issues as they arise	Section 9.6 – Environmental incidents and complaints management
		Specify the process for monitoring implementation, reporting, and auditing	Section 9 - Environmental inspection, monitoring, auditing and reporting
		Identify the party responsible for implementing of the Waste and Resources CEMP	Section 8 – Environmental roles and responsibilities SEMF Section 4 – Roles and Responsibilities Section 9.5 Review of Approved Plans
Table 28-16	Monitoring	Monitoring requirements include that:	-
		Monitoring must take place under direction of an appropriately qualified person;	Section 9.2 - Waste and resource monitoring
		The results for the monitoring must be kept in a written record	Section 9.4 Environmental reporting
		Waste material generated on the Airport Site and resources used are tracked and classified to meet the requirements of the sustainability targets outlined in the Sustainability Plan	Section 7.1 Classification of waste streams

EIS Reference	Topic	Summary	Waste and Resources CEMP Reference
		Regular site inspections are carried out to monitor compliance with the Waste and Resources CEMP, record inspection results, and inspect log available to the Infrastructure Department when asked	Section 9.1 - Environmental inspections
Table 28-16	Auditing and reporting	General reporting requirements are set out under AEPR	Note
		In addition, an annual report will be prepared and submitted to the Secretary of the Department of Infrastructure and Regional Development in relation to compliance with the Waste and Resources CEMP for the period until the airport commences operations. Auditing and reporting requirements will also be included as part of the WSA Sustainability Plan as outlined in Table 28-17 (of the EIS)	Section 9.4 - Environmental reporting
		The community and stakeholder engagement plan provide for the development of a complaints log and includes specific measures for how complaints will be managed	Section 9.6 – Environmental incidents and complaints management CSEP
Table 28-16	Responsibility	Responsibilities include:	-
		The Waste and Resources CEMP will be prepared in consultation with the NSW Environment Protection Authority and relevant local councils	Section 1.4 - Consultation requirements of this plan
		The Waste and Resources CEMP will be submitted for approval to the Infrastructure Minister or an SES Officer in the Department of Infrastructure, Transport Regional Development, Communications and the Arts (DITRDCA)	Section 1.5– Certification and approval
		The design and construct (D&C) contractor will be responsible for implementing site specific environmental procedures and work method statements applicable to the proposed woks in accordance with the requirements of the Waste and Resources CEMP	Section 1.2 – Document Purpose SEMF Section 4.4 – Roles and Responsibilities
Table 28-17	Waste avoidance	The following measures will be implemented to avoid and reduce waste: • Efficient utilisation of resources to reduce consumption; • Optimisation of detailed designs to avoid unnecessary resource consumption; • Implementation of high efficiency water systems to reduce water consumption; • Procurement policies that preference recyclable, minimal and/or returnable packaging; and • Procurement of materials in bulk, where practicable, to minimise packaging waste.	Section 6 – Environmental control measures Section 7 – Waste and resources management
Table 28-17	Reuse and recycling	Measures to reuse and recycle waste will be implemented including: • Reuse of green waste and topsoil for landscaping;	Section 6 – Environmental control measures Section 7.2 – Reuse, recovery and recycling

EIS Reference	Topic	Summary	Waste and Resources CEMP Reference
		• Reuse of excess or contaminated soils where they have been demonstrated to be suitable for re-use in accordance with RAP or other relevant guidance Reuse of waste streams including metals, oils and solvents wherever possible • Recycling of waste streams including concrete, brickwork, metals, plasterboard, plastics and timber; • Contract terms with suppliers to specify recyclable content and returnable packaging; and • Co-operation in stewardship programmes for compatible waste streams including pallets.	
Table 28-17	Waste recovery	Measures to recover and treat waste will include recovery (prior to reuse) of compatible waste including metals, oils, solvents, brickwork, metals, plasterboard, plastics and timber.	Section 6 – Environmental control measures Section 7.2 – Reuse, recovery and recycling
Table 28-17	Hazardous waste	Hazardous wastes or special wastes that require disposal off-site during construction will be managed consistently with the Protection of the Environment Operations (Waste) Regulation 2014 (NSW).	Section 6 – Environmental control measures Section 7 – Waste and resources management
Table 28-17	Waste storage and disposal	A central waste area (or areas) will be established during construction, at which waste (including recyclables) would be stored. As per Section 6.2, 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. Residual waste that cannot be avoided, reduced, reused, recycled, recovered or treated will be collected by a licensed contractor for disposal at a licensed facility.	Section 6 – Environmental control measures Section 7.3 – Waste handling and storage
Table 28-17	Illegal dumping	An illegal dumping prevention strategy will be implemented and will be developed in consultation with the NSW EPA and relevant local councils. The strategy will outline measures to be undertaken to minimise the risk of illegal dumping on the Airport Site.	Section 6 – Environmental control measures Appendix B – Illegal dumping prevention strategy
Table 28-17	Resource use	The Sustainability Plan will help to ensure that construction resources are used efficiently, and waste Is minimised.	Section 6 – Environmental control measures WSA Sustainability Plan

5. Waste and Resources Aspects and Impacts

5.1 Construction Waste Streams and Resource Consumption

Construction at the Airport Site will generate a range of waste from surplus or offcut construction materials, site clearing, earthworks and the demolition of existing infrastructure.

Various waste streams that would be generated during the construction of the Project include:

- Timber and green waste;
- Paper and office waste;
- Demolition waste;
- Excavation waste (surplus soil);
- Excavation waste (contaminated soils not able to be retained on the site);
- Construction waste;
- Waste from vehicle/ plant and other maintenance activities;
- Sewage and general waste from construction compounds;
- Drilling mud; and
- Greenhouse gases.

Natural resources and construction material will be used during construction of the Project. All quantities and sources will be confirmed during detailed design and construction methodology development for each phase of the Project. Construction activities will also use resources such as potable water, electricity, gas and fuel. **Table 10** provides a summary of the resources that will be required. As the project progresses additional works such as Standalone Facilities, other Commonwealth Agency buildings and Commercial developments. These works are smaller in nature. As part of the Contractors' Environmental Management Framework documents, resource consumption and waste streams will be identified and quantified to ensure appropriate mitigation measures are applied in alignment with this CEMP.

Table 10: Indicative Stage 1 Airport Development Quantity of Resource Requirements

Activity	Material	Quantity BEC	Quantity Terminal	Quantity (Airside)	Quantity (Landside)	Quantity (Stage 1 Cargo Works)	Potential Sources
Earthworks	Construction water	650 ML	1.4ML	240ML	183 ML	175ML	Existing surface water, farm dams and sediment basins (refer to the WSA Soil and Water CEMP) Potable water supply pipes and temporary storage dams CSR Quarry
	Diesel	35 ML	1.4ML	4,312KL	3.7 ML	400KL	Ampol Various
	Select Material Zone		NA		110,000T		
Subgrade improvement	Imported sandstone material	2,000,000 m^3	N76100m^3		4,620 T	400T	Sydney Infrastructure Projects, Graymont
Asphalt	Aggregate	12,252 T	2,700 T		35,300 T		Gunlake Marulan Quarry

Activity	Material	Quantity BEC	Quantity Terminal	Quantity (Airside)	Quantity (Landside)	Quantity (Stage 1 Cargo Works)	Potential Sources
						30,000T	Holcim Lynwood Quarry Boral Peppertree Quarry Rooty Hill Albion Park Various
	Sand	5,664 T	630 T		29,600 T	25,000T	Calga Quarry Kurnell Quarry Various
	Lime filler	402 T	50 t		1,000 T	900T	Various
	Crusher dust	4,159 T	500 T		350 T	300T	Various
	Bitumen	1,128 T	140 Ts		3,700 T	3500T	Camellia Various
Concrete	Cement	3,091 T	26,900 T		10,900 T	20,000T	Boral Cement Australia Various
	Sand	4,636 T	74,000 T		16,700 T	65,000T	Calga Quarry Kurnell Quarry Various
	Aggregate	9,273 T	101,000 T		34,900 T	80,000T	Gunlake Marulan Quarry Holcim Lynwood Quarry Boral Peppertree Quarry Various
	Fly Ash	309 T	10,000 T		3,600 T	20,000T	Various
	Admixture	155 T	201 T		200 T	180T	Various
Granular Paving	RBM800 Slag				51,000 T		Various
	DGB				60,000 T		Various
Use of Site Accommodation	Diesel	11,866 L	2.5 ML		0.14 ML		Various
	Water	1.01ML	6.25 ML		7.4 ML		Various Sydney Water
	Electricity	4967.2 kWh	140,000 kWh		1,160 MWH		Various Endeavour Energy
Aircraft Pavements & Airside Roads	Imported sandstone material			150, 000 m3			Sydney Infrastructure Projects
	P-230 Fine Crushed Rock			435, 000 m3			Hanson Bass Pt Quarry

Activity	Material	Quantity BEC	Quantity Terminal	Quantity (Airside)	Quantity (Landside)	Quantity (Stage 1 Cargo Works)	Potential Sources
							Holcim Albion Park Quarry Boral Peppertree Quarry Holcim Lynwood Quarry Gunlake Marulan Quarry
	Quarry Material for P-304 Cement Treated Base			72,000 m3			Hanson Bass Pt Quarry Holcim Albion Park Quarry Boral Peppertree Quarry Holcim Lynwood Quarry Gunlake Marulan Quarry
	P-209 Crushed Aggregate Base			88,000 m3			Hanson Bass Pt Quarry Holcim Albion Park Quarry Boral Peppertree Quarry Holcim Lynwood Quarry Gunlake Marulan Quarry
	Select Material Zone			20,000 m3			Elfords Quarry
	Dense Graded Base			25,000 m3			Oberon Quarry
Asphalt - Airside Roads and Aircraft Pavements	Aggregate			55% of 140,000t Asphalt 77,000t aggregate			Gunlake Marulan Quarry Holcim Lynwood Quarry Holcim Albion Park Quarry Oberon Quarry Boral Peppertree Quarry
	Sand			20% of 140,000t Asphalt 28,000t			Western Sydney Concrete Quarry at Wombat Holes PF Formation Sand and Concrete (NSW)
	Lime filler			2% of 140,000t Asphalt 2,800t			Asphalt Supplier
	Crusher dust			18% of 140,000t			Gunlake Marulan Quarry Holcim Lynwood Quarry

Activity	Material	Quantity BEC	Quantity Terminal	Quantity (Airside)	Quantity (Landside)	Quantity (Stage 1 Cargo Works)	Potential Sources
				Asphalt 28,000t			Boral Peppertree Quarry
	Bitumen			5% of 140,000t Asphalt 7,000t			SAMI Bitumen Technologies (NSW)
Concrete - Airside Roads and Aircraft Pavements	Cement			300kg per m3 of concrete 94,000 m3 of concrete 28,200t cement			Boral Independent Cement Cement Australia
	Natural Sand			350kg per m3 of concrete 32,900t sand			Western Sydney Concrete Quarry at Wombat Holes PF Formation Sand and Concrete (NSW
	Manufactured Sand			100 kg per m3 of concrete 9,400t sand			Gunlake Marulan Quarry Oberon Quarry
	Aggregate			1000 kg per m3 of concrete 94,000t aggregate			Gunlake Marulan Quarry Holcim Lynwood Quarry Boral Peppertree Quarry
	Fly Ash			100 kg per m3 of concrete 9,400t flyash			Various
Office and crib facilities	Diesel			268,284 L			Ampol and various
	Water			4.56 ML			Sydney Water
	Electricity			2500 MwH			Various
M12 on Airport	Concrete			3,500m^3			Various
	Steel			550T			Various
	General Fill			400m^3			Various
	Aggregates			350m^3			Various
Building works and services	Diesel					80KL	Various
	Water					20KL	Various
	Electricity					1,160 MWH	Various

5.2 Impacts

Poor management of waste has the potential to result in the following impacts:

- Various types of waste being generated and stored on site, with the potential for misclassification or mishandling;
- Excessive waste being directed to landfill;
- Excessive material importation (if opportunities for re-use of onsite material are not taken);
- Excessive use of construction or potable water; and
- Contaminated waste being incorrectly disposed of.

The overall impact of construction waste is manageable and acceptable. Waste will be managed in accordance with statutory requirements and procedures identified in this plan.

5.3 Environmental Risk Assessment

A risk assessment has been undertaken as part of the review and development of this CEMP and in accordance with the Environmental Aspects, Impact and Risk Procedure (Appendix G of the SEMF). The parts of the overall risk assessment relevant to Waste and Resources have been extracted and summarised in **Table 11** apply to all phases of works that the Construction Plan authorises.

The identification of construction activities and associated impacts that could eventuate during construction of the Project is central to the selection of appropriate environmental safeguards.

The risk management process involved an assessment of all specific Project activities/aspects in or near environmentally sensitive areas and resulted in the development of a list of environmental risks (aspects and impacts) and a corresponding risk mitigation strategy and risk ranking.

The identification of risks included a review of the works, and review of the environmental risks identified by the EIS. The mitigations in the risk assessment align with the EIS mitigation measures Table 28-17.

Table 11: Waste and Resources Risk Assessment

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
1	Use of site compound	Compound waste sorting	Waste generation	Recyclable materials going to landfill	Low (9)	WR_01 WR_05 WR_14 WR_15 WR_17 WR_25	Low (6)	Waste and Resources CEMP EWMS Soil and Water CEMP RAP Induction ECM Complaints Procedure WSA SEMF
2	Earthworks	Contamination works	Contamination	Improper management, remediation, handling and/or disposal of contaminated waste	Medium (13)	WR_01 WR_05 WR_11 WR_13 WR_21 WR_22	Low (9)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure WSA SEMF
3	Earthworks	Materials storage	Contamination	Improper storage of hazardous materials	Medium (13)	WR_01 WR_05 WR_14 WR_15 WR_17 WR_20 WR_21 WR_22	Low (9)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
4	Earthworks	Exporting contaminated waste	Waste generation	Improper disposal of contaminated waste by subcontractor	Medium (18)	WR_01 WR_05 WR_11 WR_23	Medium (14)	Waste and Resources CEMP WSA SEMF Soil and Water CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure
5	Earthworks	Plant and machinery use	Energy use	Inefficient use of plant and equipment	Low (5)	WR_10 WR_26	Very Low (3)	Waste and Resources CEMP EWMS Induction Complaints Procedure
6	Earthworks	Sediment control maintenance	Waste generation	Missing opportunities for material reuse	Low (9)	WR_01 WR_05 WR_09	Low (6)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Complaints Procedure Sustainability Plan
7	Infrastructure works	Road construction	Waste generation	Recyclable materials going to landfill	Medium (13)	WR_01 WR_03 WR_05 WR_08 WR_15 WR_25	Low (6)	Waste and Resources CEMP EWMS Soil and Water CEMP RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure Sustainability Plan WSA SEMF

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
8	Infrastructure works	Culvert and bridge construction	Waste generation	Recyclable materials going to landfill	Low (9)	WR_01 WR_03 WR_05 WR_08 WR_25	Low (6)	Waste and Resources CEMP WSA SEMF Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure
9	All works	General education	Site requirements	Failure to follow site protocols	Low (9)	WR_01 WR_02 WR_04 WR_10	Low (6)	Waste and Resources CEMP WSA SEMF Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Complaints Procedure Sustainability Plan
10	All works (	General education	Incidents (spills, site contamination)	Failure to report issues and incidents resulting in increased waste due to contamination	Low (9)	WR_01 WR_02 WR_04 WR_10 WR_12	Low (6)	Waste and Resources CEMP Soil and Water CEMP EWMS RAP Induction ECM Complaints Procedure WSA SEMF
11	Environmental records management	All works	Waste tracking	Failure to track waste leading to improper waste management and record keeping	Medium (13)	WR_03 WR_05 WR_11 WR_13 WR_18 WR_19	Low (9)	Waste and Resources CEMP WSA SEMF Soil and Water CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure Sustainability Plan

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
12	General	all works	Illegal dumping	Materials (including potential contaminated materials) being illegally dumped onto site.	Medium (13)	WR_10 WR_24	Low (9)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure Visual and Landscape CEMP
13	Building construction	Concrete slab/footing	Concrete washout	Soil and water contamination Inappropriate disposal of concrete	Medium (13)	WR_11 WR_17	Low (6)	Waste and Resources CEMP Soil and Water CEMP ECM WSA SEMF
14	Building Construction	Installation of structure	Waste generation	Recyclable materials going to landfill	Medium (13)	WR_02 WR_04 WR_14 WR_15	Low (6)	Waste and Resources CEMP Soil and Water CEMP ECM RAP Induction ECM Waste tracking register Material Movement Plan Sustainability Plan WSA SEMF
15	Building construction	Installation of structure	Material selection	Depletion of non-renewable resources	Medium (13)	WR_02 WR_04 WR_14 WR_15	Low (6)	Waste and Resources CEMP Soil and Water CEMP ECM Sustainability Plan
16	Material importation	Stockpiling select material for future use as structural material	Contamination	Material contaminated and/or material not suitable for importation to site	Medium (13)	WR_16	Low (6)	Waste and Resources CEMP Soil and Water CEMP Air Quality CEMP ECM Material tracking Sustainability Plan RAP WSA SEMF

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
17	General Construction Works	General education	Site requirements	Failure to follow site protocols resulting in incorrect disposal or reduced landfill avoidance	Low (9)	WR_03	Low (6)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
18	General Construction Works	Incidents (spills, site contamination)	Site requirements	Failure to report issues and incidents resulting in increased waste due to contamination	Medium (18)	WR_01 WR_12	Medium (14)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
19	General Construction Works	Operation of Mobile Plant and Equipment	Energy use	Inefficient use of plant and equipment	Low (6)	WR_01 WR_26 WR_27	Very Low (1)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
20	General Construction Works	Dewater Site	Waste generation	Recyclable water going waterways	Low (9)	WR_01 WR_03 WR_05 WR_08 WR_25	Low (6)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
21	General Construction Works	Delivery of materials	Waste generation	Excess waste to landfill	Low (9)	WR_01 WR_03 WR_05 WR_08 WR_25	Low (6)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
22	General Construction Works	Delivery of materials	Energy use	Excess energy use from non-local suppliers	Low (9)	WR_01 WR_26 WR_27	Low (6)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
23	General Construction Works	Water treatment facility operation	Waste generation	Recyclable water going waterways	Low (9)	WR_01 WR_05 WR_08 WR_25	Low (6)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
24	General Construction Works	Disposal of Waste	Waste Management	Recyclable materials going to landfill	Low (9)	WR_01 WR_03	Low (6)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure WSA SEMF
25	General Construction Works	Installation of structure	Waste Management	Recyclable materials going to landfill	High (20)	WR_01 WR_03 WR_05 WR_08 WR_25	Low (6)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure WSA SEMF

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
26	Apron Pavement Production	Batch Plant Operation	Waste Generation	Inefficient use of plant and equipment. Excess waste and Recyclable materials going to landfill. Missing opportunities for material reuse	Medium (18)	WR_30 WR_31 WR_32	Low (6)	Waste and Resources CEMP EWMS Induction ECM Complaints Procedure Material Movement Plan Waste tracking register Sustainability Plan
27	Apron Pavement Production	Batch Plant Operation	Concrete / Cement Slurry Waste	Improper management, treatment, handling and/or disposal of contaminated waste	Medium (14)	WR_33 WR_35	Low (6)	Waste and Resources CEMP EWMS Induction ECM Waste tracking register WSA SEMF
28	Apron Pavement Production	Batch Plant Operation	Alkaline water (high PH)	Missing opportunities for wastewater reuse	Medium (14)	WR_34 WR_35	Low (6)	Waste and Resources CEMP EWMS Induction ECM Waste tracking register
29	Apron Pavement Production	Batch Plant Operation	Chemical waste (incl decanted drums / containers, oil, filters, tyres and batteries)	Improper storage of hazardous materials. Improper management, remediation, handling and/or disposal of contaminated waste	Medium (14)	WR_30	Low (6)	Waste and Resources CEMP EWMS Induction ECM Waste tracking register WSA SEMF

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
30	Site Establishment	Delivery compound establishment materials	Waste generation	Excess waste to landfill	Low (9)	WR_01 WR_04	Low (6)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS Remediation Action Plan (RAP) Induction Environmental Control Map (ECM) Complaints Procedure
31	Site Establishment	Delivery of bulk quarry materials and site buildings	Energy use	Excess energy use from non-local suppliers	Low (9)	WR_02 WR_03 WR_04 WR_26	Low (6)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Complaints Procedure
32	Site Establishment	Compound waste sorting	Waste generation	Recyclable materials going to landfill	Low (9)	WR_01 WR_05 WR_14 WR_15 WR_17 WR_25	Low (6)	Waste and Resources CEMP EWMS Soil and Water CEMP RAP Induction ECM Complaints Procedure WSA SEMF
33	Infrastructure works	Road construction	Waste generation	Recyclable materials going to landfill	Medium (13)	WR_01 WR_03 WR_05 WR_08 WR_15 WR_25	Low (6)	Waste and Resources CEMP EWMS Soil and Water CEMP RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure Sustainability Plan WSA SEMF

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
34	Asphalt Plant Operations	Asphalt plant operation	Waste generation	Inefficient use of plant and equipment. Excess waste and Recyclable materials going to landfill. Missing opportunities for material reuse	Medium (18)	WR_30 WR_31 WR_32	Low (6)	Waste and Resources CEMP, EWMS, Induction, ECM, Complaints Procedure, Material Movement Plan, Waste tracking register, Sustainability Plan
35	Civil Works	Incidents – Spill Management	Failure to Report issues incidents related to waste and resources	Failure to follow site protocols	Low (9)	WR_01 WR_12	Low (6)	Waste and Resources CEMP Soil and Water CEMP EWMS Induction ECM
36	Civil Works	Operation of Mobile Plant and Equipment	Energy Use resulting in unnecessary use of energy/fuel	Inefficient use of plant and equipment	Low (6)	WR_01 WR_26 WR_27	Low (6)	Waste and Resources CEMP Soil and Water CEMP EWMS Induction ECM
37	All Works	Dewater site	Waste generation	Recyclable water going to waterways	Low (9)	WR_01 WR_03 WR_05 WR_25	Low (6)	Waste and Resources CEMP Soil and Water CEMP EWMS Induction ECM
38	All Works	Delivery of Materials	Waste Generation	Excess waste to landfill	Low (9)	WR_01 WR_03 WR_05 WR_08 WR_25	Low (6)	Waste and Resources CEMP Soil and Water CEMP EWMS Induction ECM
39	All Works	Delivery of Materials	Energy Use	Excess energy use from non-local suppliers	Low (9)	WR_01 WR_26 WR_27	Low (6)	Waste and Resources CEMP Soil and Water CEMP EWMS Induction ECM

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
40	All Works	Waste Disposal	Waste Management	Recyclable material going to landfill	Medium (18)	WR_01 WR_03 WR_05 WR_08 WR_25	Low (6)	Waste and Resources CEMP Soil and Water CEMP EWMS Induction ECM
41	All Works	Environmental Records	Waste Tracking	Failure to track waste per requirements	Medium (13)	WR_03 WR_05 WR_11 WR_13 WR_18 WR_19	Low (6)	Waste and Resources CEMP Soil and Water CEMP EWMS Induction ECM Waste Tracking Register WSA SEMF
42	Site Establishment	Installation of ERSED controls	Energy use	Inefficient use of plant and equipment resulting in unnecessary use of energy/fuel	Low (5)	WR_10 WR_26	Very Low (3)	Waste and Resources CEMP EWMS Induction Complaints Procedure
43	Site Establishment	Installation of ERSED controls	Waste generation	Missing opportunities for material reuse	Low (9)	WR_01 WR_05 WR_09	Low (6)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Complaints Procedure Sustainability Plan
44	Site Establishment	Clearing and Grubbing (if required)	Waste generation	Excess waste to landfill	Low (9)	WR_01 WR_03 WR_06	Low (6)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Complaints Procedure WSA SEMF

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
45	Site Establishment	Contamination investigation and removal	Contamination	Improper management, remediation, handling and/or disposal of contaminated waste	Medium (13)	WR_01 WR_05 WR_11 WR_13 WR_21 WR_22	Low (9)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure
46	Site Establishment	Installation of temporary buildings for compound, parking and amenities	Waste generation	Recyclable materials going to landfill	Low (9)	WR_01 WR_05 WR_14 WR_15 WR_17 WR_25	Low (6)	Waste and Resources CEMP EWMS Soil and Water CEMP RAP Induction ECM Complaints Procedure
47	Site Establishment	Delivery materials to compound	Energy use	Excess energy use from non-local suppliers	Low (9)	WR_02 WR_03 WR_04 WR_26	Low (6)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Complaints Procedure
48	Site Establishment	Storage of hazardous Chemical / Materials / Fuels	Contamination	Improper storage of hazardous materials	Medium (13)	WR_01 WR_05 WR_14 WR_15 WR_17 WR_20 WR_21 WR_22	Low (9)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure WSA SEMF

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
49	Site Establishment	Compound waste sorting	Waste generation	Recyclable materials going to landfill	Low (9)	WR_01 WR_05 WR_14 WR_15 WR_17 WR_25	Low (6)	Waste and Resources CEMP EWMS Soil and Water CEMP RAP Induction ECM Complaints Procedure
50	Utility Works	Potholing, trenching, underbore, relocation and installation of services	Contamination	Improper management, remediation, handling and/or disposal of contaminated waste	Medium (13)	WR_01 WR_05 WR_11 WR_13 WR_21 WR_22	Low (9)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure
51	Earthworks and Drainage	Topsoil stripping	Contamination	Improper management, remediation, handling and/or disposal of contaminated waste	Medium (13)	WR_01 WR_05 WR_11 WR_13 WR_21 WR_22	Low (9)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure
52	Earthworks and Drainage	Stockpiling	Contamination	Material contaminated and/or material not suitable for importation to site	Medium (13)	WR_16	Low (6)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP Air Quality CEMP ECM Material tracking Sustainability Plan RAP

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
53	Earthworks and Drainage	Exporting contaminated waste (if required)	Waste generation	Improper disposal of contaminated waste by subcontractor	Medium (18)	WR_01 WR_05 WR_11 WR_23	Medium (14)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure
54	Earthworks and Drainage	Import and export of materials from site	Energy use	Excess energy use from non-local suppliers	Low (9)	WR_02 WR_03 WR_04 WR_26	Low (6)	Waste and Resources CEMP Soil and Water CEMP Biodiversity CEMP EWMS RAP Induction ECM Complaints Procedure
55	Earthworks and Drainage	Dewatering	Waste generation	Recyclable water going waterways	Low (9)	WR_01 WR_03 WR_05 WR_08 WR_25	Low (6)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
56	Earthworks and Drainage	Operation of plant and machinery	Energy use	Inefficient use of plant and equipment	Low (6)	WR_01 WR_26 WR_27	Very Low (1)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
57	Earthworks and Drainage	Incidents (spills, site contamination)	Site requirements Contamination	Failure to report issues and incidents resulting in increased waste due to contamination	Medium (18)	WR_01 WR_12	Medium (14)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
58	Bridge Works	Piling	Waste Management	Recyclable materials going to landfill	Low (9)	WR_01 WR_03	Low (6)	WSA SEMF Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
59	Bridge Works	Concreting	Operation of Mobile Plant and Equipment	Inefficient use of plant and equipment	Low (6)	WR_01 WR_26 WR_27	Very Low (1)	WSA SEMF Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
60	Bridge Works	Concrete washouts	Waste management	Soil and water contamination Inappropriate disposal of concrete	Medium (13)	WR_11 WR_17	Low (6)	Waste and Resources CEMP Soil and Water CEMP ECM
61	Road Construction	Paving, including paving machine, trucks and pumps	Energy use	Inefficient use of plant and equipment	Low (6)	WR_01 WR_26 WR_27	Very Low (1)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
62	Road Construction	Asphalting	Waste generation	Inefficient use of plant and equipment. Excess waste and Recyclable materials going to landfill. Missing opportunities for material reuse	Medium (18)	WR_30 WR_31 WR_32	Low (6)	Waste and Resources CEMP, EWMS, Induction, ECM, Complaints Procedure, Material Movement Plan, Waste tracking register, Sustainability Plan
63	Road Construction	Concrete cutting, drilling and grinding works	Waste management	Soil and water contamination Inappropriate disposal of concrete	Medium (13)	WR_11 WR_17	Low (6)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP ECM
64	Road Construction	Line marking	Energy use	Inefficient use of plant and equipment resulting in unnecessary use of energy/fuel	Low (6)	WR_01 WR_26 WR_27	Very Low (1)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
65	Shared User Path Construction	Concreting, including trucks and pumps	Energy use	Inefficient use of plant and equipment resulting in unnecessary use of energy/fuel	Low (6)	WR_01 WR_26 WR_27	Very Low (1)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM Complaints procedure
66	Landscaping and Stabilisation	Stockpiling	Waste generation	Improper disposal of contaminated waste by subcontractor	Medium (18)	WR_01 WR_05 WR_11 WR_23	Medium (14)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
67	Landscaping and Stabilisation	Planting	Energy use	Inefficient use of plant and equipment resulting in unnecessary use of energy/fuel	Low (6)	WR_01 WR_26 WR_27	Very Low (1)	Waste and Resources CEMP Soil and water CEMP EWMS Induction ECM Complaints procedure
68	Structural Erecting	Installation of structure	Waste Management	Recyclable materials going to landfill	Medium (18)	WR_01, WR_03, WR_05, WR_08, WR_25	Medium (14)	WSA SEMF Waste and Resources CEMP, Soil and Water CEMP, Biodiversity CEMP, EWMS, Induction, ECM, Complaints Procedure
69	Structural Erecting	Installation of structure	Material selection	Depletion of non-renewable resources	Medium (18)	WR_01, WR_03, WR_05, WR_08, WR_25	Medium (18)	Waste and Resources CEMP, Soil and Water CEMP, Biodiversity CEMP, EWMS, Induction, ECM, Complaints Procedure
70	Commissioning	Disposal of Waste	Waste Management	Improper disposal of waste by subcontractor	Medium (18)	WR_01 WR_05 WR_11 WR_23	Medium (14)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure Specific risk assessment and Commissioning plan

Ref	Activity	Construction Aspect	Environmental Aspect	Potential Impact	Risk level pre-mitigation	Mitigation measure	Risk level post-mitigation	Management tools
71	Commissioning	Incidents (spills, site contamination)	Site requirements	Failure to report issues and incidents related to waste and resources	Medium (18)	WR_01 WR_12	Medium (14)	Waste and Resources CEMP Soil and water CEMP Biodiversity CEMP EWMS Induction ECM
72	Commissioning	Disposal of Waste	Construction of Permanent Utilities	Improper disposal of waste by subcontractor	Medium (18)	WR_01 WR_05 WR_11 WR_23	Medium (14)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure
73	Testing and Commissioning	Testing and Commissioning of fuel lines, fuel tanks, utilities etc	Consumption of resources such as Electricity, Water and fuel	Improper disposal of resources by subcontractor	Medium (18)	WR_01 WR_05 WR_11 WR_23	Medium (14)	WSA SEMF Waste and Resources CEMP Soil and Water CEMP EWMS RAP Induction ECM Waste tracking register Material Movement Plan Complaints procedure

6. Environmental Control Measures

Mitigation and management measures that will be implemented during construction to address impacts on waste and resources are detailed in **Table 12** and are consistent with those provided in Tables 28-16 and 28-17 in Chapter 28 of the EIS, as per Condition 13 (Section 3.11.2) of the Airport Plan.

The relevant control measures will be included in the site-specific Environmental Work Method Statement (EWMS) and Environmental Control Map (ECM) – refer to Section 4.3 of the SEMF for further detail.

Table 12: Environmental Control Measures

ID	Measure/Requirement	When to Implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract EEW: Early Earthworks MI: Material Importation All Contractors: BEC, MI, TSS, ACP, LCB, M12 & Utilities, ancillary developments, other building activities, aviation support facilities and other contractors as delegated by WSA					
GENERAL					
WR_01	The NSW Government's Waste Management Hierarchy of "avoid-reduce-reuse- recycle- dispose" will be followed as the framework of waste management throughout the Project.	Pre-construction Construction	Implement waste sorting system early in the Project and monitor effectiveness/ensure waste avoidance methodologies used by construction team. For further information refer to Section 7.8 of this CEMP	All Contractors	EIS Section 28.5.
WR_02	A procurement strategy will be implemented that will demonstrate value for money and that it has considered opportunities to procure goods and services: • From local suppliers. • That are energy efficient or have low embodied energy. • That minimise the generation of waste. • That makes use of recycled materials.	Construction	The procurement strategy developed for the Project aims to buy locally to reduce delivery distances, reduce overall waste such as packaging and use recycled materials where possible. For further information refer to Section 7.2 of this CEMP.	All Contractors	Good practice
WR_03	Waste management measures from this Waste and Resources CEMP will be included in relevant EWMS to be developed prior to the commencement of specific activities. This would include: • Reuse of excavated road materials would be maximized as far as possible where they are cost, quality and performance competitive to reduce use of materials (with embedded energy). • Assess opportunities to use local materials to reduce transport emissions	Pre-construction / Construction	Address management measures into EWMS for construction activities including bulk excavation, material export and stockpiling activities. Continual site staff education including toolbox talks and inductions. For further information refer to section 7. Waste and resources management and 7.8 Waste management hierarchy of this CEMP.	All Contractors	Good practice

ID	Measure/Requirement	When to Implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract EEW: Early Earthworks MI: Material Importation All Contractors: BEC, MI, TSS, ACP, LCB, M12 & Utilities, ancillary developments, other building activities, aviation support facilities and other contractors as delegated by WSA					
WR_04	The following measures will be implemented to avoid and reduce waste: • Efficient utilisation of resources to reduce consumption; • Optimisation of detailed designs to avoid unnecessary resource consumption; • Implementation of high efficiency water systems to reduce water consumption; • Procurement policies that preference recyclable, minimal and/or returnable packaging; and • Procurement of materials in bulk, where practicable, to minimise packaging waste.	Design/ Construction	Continual site staff education including toolbox talks and inductions. Installation and operation of energy efficient facilities where applicable Recycled site water will be used as the primary source of dust control and construction activities like compaction. Materials are bought in bulk to limit packaging waste. Review stages of design and identify opportunities to minimise resource consumption. For more information, see WSA Green Office Guidelines and Section 7. Waste and resources management and Section 7.8 Waste management hierarchy of this CEMP.	All Contractors	EIS Table 28-17
WR_05	All waste that cannot be re-used or recycled onsite will be classified and disposed of in accordance with the Waste Classification Guidelines Parts 1 and 2 (EPA, 2014) Excavated material that is not suitable for on-site reuse or recycling will be transported to a site that may legally accept that material for reuse or disposal. Soils leaving the site will be waste classified so that correct resource recovery and or off-site disposal occur.	Pre-construction / Construction	All waste will be classified and the receivers EPL documented to ensure waste streams are appropriately managed and tracked. Offsite disposal locations to be provided and approved prior to material leaving site in accordance with the imported and waste management protocols. For further information refer to Section 7.4 of this CEMP.	All Contractors	Good practice
WR_06	Cleared vegetation will be reused or recycled to the greatest extent practicable for example: • Mulching of vegetation for use in landscaping; • Spreading of vegetation for fauna habitat in suitable areas where agreements are made for this (e.g. mulch, small timber, hollow logs); • Donation of other timber to community or environmental groups.	Construction	Mulch will be utilised onsite for environmental controls and ground stabilisation. Vegetation spreading will be in line with the Biodiversity CEMP and best practice. Larger diameter timbers will be offered to community and environmental groups in the area. For further information please refer to Section 7.2 - Reuse, Recovery and Recycling.	All Contractors	Good practice Biodiversity CEMP
WR_07	Weeds will be managed, handled and disposed of in accordance with the Weed Management Plan (refer to the	Construction	Implementation of Weed Management Plan (included in the WSA Biodiversity CEMP).	All Contractors	EIS Table 28-4 (Biodiversity CEMP)

ID	Measure/Requirement	When to Implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract EEW: Early Earthworks MI: Material Importation All Contractors: BEC, MI, TSS, ACP, LCB, M12 & Utilities, ancillary developments, other building activities, aviation support facilities and other contractors as delegated by WSA					
	Biodiversity CEMP). If disposal is appropriate, the weed material will be transferred to a licensed waste facility.				Good practice Biodiversity CEMP
WR_08	Concrete, asphalt, bricks/masonry and steel products are to be reused on site where possible. Alternatively, they will be sent off-site for recycling.	Construction	All site won materials, and site generated materials will be reused where practical. All materials leaving site are recycled where possible. Waste reports are received monthly from the waste exporter to track recycled content. For further information please refer to Section 7.2 Reuse, Recovery and Recycling.	All Contractors	Good practice
WR_09	Sediment recovered from erosion and sediment control devices will be reused on site as general fill material or it will be incorporated within landscaping materials where possible.	Construction	Sediment will be mixed in with general fill and reused. Sediment will not be taken to landfill. For further information please refer to sections 7.2 - Reuse, Recovery and Recycling and 7.3 - Waste Handling and Storage.	All Contractors	Good Practice
WR_10	All staff and subcontractors will undergo a site induction and ongoing toolbox talks that will detail waste minimisation and reuse management measures, including the requirements of the waste management hierarchy. Waste minimisation training will include energy consumption awareness that promotes energy conservation methods including minimising energy use by switching off equipment when not in use.	Construction	All staff, workers and visitors are required to undertake the WSA Project induction before attending site. The induction will cover all areas of the Project CEMPs, including waste avoidance and energy minimisation. For further information please refer to Section 10 Competence, training and awareness.	All Contractors	Good Practice
WR_11	Contaminated land management must be undertaken in accordance with the WSA Soil and Water CEMP and the Remediation Action Plan.	Pre-construction Construction	Soil and Water CEMP is to be implemented as required. The RAP will be implemented under the guidance and supervision of the WSA Environment Manager	All Contractors	Good Practice
WR_12	An emergency spill response procedure will be prepared to minimise the impact of any accidental spills, and include details on the requirements for managing spills, disposing of any contaminated waste, and reporting of any such incidents. Any waste generated by a spill and associated clean-up requiring off-site disposal will be done in accordance with the NSW EPA Waste Classification Guidelines (2014).	Pre-construction Construction	Emergency spill response will be undertaken as per the Soil and Water CEMP and reported upon occurrence.	All Contractors	Good Practice
WASTE / REUSE MATERIALS HANDLING					

ID	Measure/Requirement	When to Implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract EEW: Early Earthworks MI: Material Importation All Contractors: BEC, MI, TSS, ACP, LCB, M12 & Utilities, ancillary developments, other building activities, aviation support facilities and other contractors as delegated by WSA					
WR_13	Hazardous wastes or special wastes that require disposal off-site during construction will be managed consistently with the *Protection of the Environment Operations (Waste) Regulation 2014* (NSW).	Construction	To be implemented under the supervision of the construction and environmental management teams.	All Contractors	EIS Table 28-17
WR_14	Measures to reuse and recycle waste will be implemented including: Reuse of green waste and topsoil for landscaping; Reuse of excess or contaminated soils where they have been demonstrated to be suitable for re-use in accordance with RAP or other relevant guidance Reuse of waste streams including metals, oils and solvents wherever possible. Recycling of waste streams including concrete, brickwork, metals, plasterboard, plastics and timber; Contract terms with suppliers to specify recyclable content and returnable packaging; and Co-operation in stewardship programmes for compatible waste streams including pallets. Where soil/spoils required disposal to a licensed facility, that all measures have been undertaken to achieve the lowest waste classification in accordance with the NSW EPA 2014 Waste Classification Guidelines	Construction	Waste streams will be recycled and reported monthly showing the percentage of recycled materials, and percentage taken to landfill. For further information please refer to Section 7.2 Reuse, Recovery and Recycling.	All Contractors	EIS Table 28-17
WR_15	Measures to recover and treat waste will include recovery (prior to reuse) of compatible waste including metals, oils, solvents, brickwork, metals, plasterboard, plastics and timber.	Construction	Metals, bricks, concrete, plasterboard, plastics and timber will be recycled and reported on as per WR14 by Contractors. Oils and solvents will be managed as per hazardous waste protocols. Recovery and treatment processes may vary between each package due to different Contractors and Waster Service Providers. For further information please refer to Section 7.2 Reuse, Recovery and Recycling.	All Contractors	EIS Table 28-17
WR_16	Imported material to be validated prior to delivery to site. Appropriate material classification demonstrating the material is suitable to be supplied. Process for tracking the material from supplier to site to be implemented.	Construction	Material tracking process to be followed. Documentation required (e.g., EPA exemption/order to be provided for material not ENM/VENM.)	All Contractors	Good practice AEPR
WASTE DISPOSAL					

ID	Measure/Requirement	When to Implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract EEW: Early Earthworks MI: Material Importation All Contractors: BEC, MI, TSS, ACP, LCB, M12 & Utilities, ancillary developments, other building activities, aviation support facilities and other contractors as delegated by WSA					
WR_17	A central waste area (or areas) will be established during construction, at which waste (including recyclables) would be stored. As per Section 6.2, 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. Residual waste that cannot be avoided, reduced, reused, recycled, recovered or treated will be collected by a licensed contractor for disposal at a licensed facility.	Construction	To be undertaken by setting up a waste sorting area early in the Project. For more information, please refer to Section 7.4 Waste Disposal.	All Contractors	EIS Table 28-17
WR_18	A Waste Management Register of all waste collected for disposal and/or recycling will be maintained monthly until final completion.	Construction	Refer to Appendix A of this Plan.	All Contractors	Good Practice
WR_19	Waste will be managed and disposed of in accordance with the PoEO Act and the NSW Waste Classification Guidelines (EPA, 2014). Wastes that are unable to be reused or recycled will be disposed of offsite at a licensed waste management facility, following classification.	Construction	To be undertaken as per WR18. For more information, please refer to Section 7.1 Classification of Waste Streams and Section 7.4 Waste Disposal.	All Contractors	Good Practice
WR_20	Oils and other hazardous liquids will be labelled and stored in a sealed container within a bunded area. Material collected from within bunded areas will be disposed off-site at a waste facility approved by the EPA.	Construction	A bunded hazardous material storage container will be used on the Project and inspected weekly. For more information, please refer to Section 7.4 Waste Disposal.	All Contractors	Good Practice
WR_21	The relevant licenses of waste facilities utilised for the disposal of Project waste will be obtained (on a regular basis if necessary) to ensure they are legally able to accept that waste.	Construction	All waste facilities will be vetted to ensure the waste they are receiving from the Project is permissible. Facilities outside of NSW are not to be used unless WSA has provided approval. For more information, please refer to Section 7.4 Waste Disposal.	All Contractors	Good Practice
WR_22	The disposal of chemical, fuel and lubricant containers, solid and liquid wastes must be in accordance with the requirements of the local Council or the NSW EPA.	Construction	Hazardous materials and containers will be stored onsite until disposed of by a licensed contractor. For more information, please refer to Section 7.4 Waste Disposal	All Contractors	Good Practice

ID	Measure/Requirement	When to Implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract EEW: Early Earthworks MI: Material Importation All Contractors: BEC, MI, TSS, ACP, LCB, M12 & Utilities, ancillary developments, other building activities, aviation support facilities and other contractors as delegated by WSA					
WR_23	All trucks transporting wastes off site will be appropriately licensed to carry the materials to appropriately licensed waste facilities.	Construction	All waste to be transported to a suitably licensed waste transporter (refer WR_21)	All Contractors	Good Practice
WR_24	An illegal dumping prevention strategy will be implemented and will be developed in consultation with the NSW EPA and relevant local councils. The strategy will outline measures to be undertaken to minimise the risk of illegal dumping on the Airport Site.	Pre-construction	An illegal dumping prevention strategy has been prepared, see Appendix B of this plan.	All Contractors	EIS Table 28-17
WR_25	In the event that WSA are unable to achieve the targets set out in Section 3.2 with regards to reuse and recycling and therefore off-site waste disposal is required, consultation is to be undertaken with the relevant waste management providers to ensure they are capable of handling any significant waste streams and also to confirm that our waste management practices do not place unnecessary burden on local and regional waste services.	Construction	Monthly reporting is to be monitored. If recycling targets are not being met, and additional landfill disposal is required, consult with the relevant waste management facilities. For more information, please refer to Section 3.2 Targets and Performance Criteria and Section 9 Environmental Inspection, Monitoring, Auditing and Reporting	All Contractors	Good Practice
ENERGY CONSERVATION					
WR_26	The Sustainability Plan will help to ensure that construction resources are used efficiently, and waste Is minimised.	Construction	The Sustainability Plan will be prepared to address WR_26.	All Contractors	EIS Table 28-17
WR_27	Energy efficient work practices will be implemented, including the consideration of: ▪ Energy efficient design of site buildings. ▪ Design of construction work sites to minimise unnecessary vehicle movement. ▪ Assess energy (fuel/electricity) efficiency when selecting equipment ▪ Regular servicing of site plant and equipment. ▪ Training of personnel in energy efficient best practices; and ▪ Use of locally sourced material where available and of suitable quality.	Construction	The WSA Project induction, prestart and toolboxes will discuss limiting idling plant, carpooling to and from the compound and other energy saving practices. All plant and equipment will be serviced as required, to be informed by the daily pre-start checks Local providers / sources of material will be considered in the procurement process, with cost savings due to reduced delivery / transportation. For more information, please refer to Section 7.5 Energy Conservation.	All Contractors	Good Practice
IMPORTED MATERIAL					

ID	Measure/Requirement	When to Implement	How to implement	Responsibility for Implementation	Reference
BEC: Bulk Earthworks Contract EEW: Early Earthworks MI: Material Importation All Contractors: BEC, MI, TSS, ACP, LCB, M12 & Utilities, ancillary developments, other building activities, aviation support facilities and other contractors as delegated by WSA					
WR_28	All materials to be imported onto the Site must satisfy the requirements of the Remediation Action Plan.	Construction	Ensure that the appropriate certification documentation has been provided to WSA environment team, prior to the importation of material/s onto the Site. For more information refer to Section 7.7 Imported Material Management.	All Contractors	RAP
WR_29	Track and record the type, amount and location of material/waste imported, reused, recycled, stockpiled, and disposed of (including for Temporary Works).	Construction	Maintain an imported material tracking register and a waste material tracking register until the Date of Construction Completion. For more information refer to Section 9.4 Environmental Reporting	All Contractors	Good Practice
APRON PAVEMENT PRODUCTION					
WR_30	Ensure appropriate waste bins as are in place prior to commencement of works (incl HazChem containers)	Construction	Waste bin locations documented on ECM. All personnel will undertake inductions and reiterated through ongoing site training.	All Contractors	Good Practice
WR_31	Pugmill production to be carefully managed to minimise the amount of unused material.	Construction	Information will be provided in inductions and reiterated through ongoing site toolboxes and training.	All Contractors	Good Practice
WR_32	Where possible, slurry waste or CTB shall be recycled on site (if possible)	Construction	Information will be provided in inductions and reiterated through ongoing site toolboxes and training.	All Contractors	Good Practice
WR_33	Appropriate segregation of Cementitious waste to enable re-use or recycling options on site	Construction	Information will be provided in inductions and reiterated through ongoing site toolboxes and training.	All Contractors	Good Practice
WR_34	Approved concrete washout area Location not within 50m of a sensitive receiver	Construction	Information will be provided in inductions and reiterated through ongoing site toolboxes and training.	All Contractors	Good Practice
WR_35	Store alkaline water (high pH) onsite in designated pits or tanks and treat for pH and turbidity and reuse as washout or haul road dust suppression. If contaminated water cannot be treated, dispose offsite using adequately licensed sub-contractor to a licensed facility	Construction	Wastewater from batch plant activities will follow the requirements in the Soil and Water CEMP Information will be provided in inductions and reiterated through ongoing site toolboxes and training.	All Contractors	Good Practice

7. Waste and Resources Management

7.1 Classification of Waste Streams

Where waste cannot be avoided, reused or recycled it will be classified and appropriately disposed of to a licenced facility.

As waste leaves the Airport Site, it will be classified using the procedure outlined in the WSA Waste Classification Procedure (Appendix R of the SEMF) and in accordance with the EPA Waste Classification Guidelines Part 1: Classifying Waste (2014). Further details of the waste classification process are provided in **Table 13**.

Table 13: Waste Classification Process (EPA, 2014)

Classification Step	Description
Step 1: Is it 'special waste'?	Establish if the waste should be classified as special waste. Special wastes are: • Clinical and related • Asbestos • Waste tyres **Note:** Asbestos and clinical wastes must be managed in accordance with the requirements of Clauses 42 and 43 of the *Protection of the Environment Operations (Waste) Regulation 2005*.
Step 2: If not special, is it 'liquid waste'?	If it is established that the waste is not special waste, it must be decided whether it is 'liquid waste'. Liquid waste means any waste that: has an angle of repose of less than 5° above horizontal becomes free-flowing at or below 60° Celsius or when it is transported is generally not capable of being picked up by a spade or shovel. Liquid wastes are sub-classified into: • Sewer and stormwater effluent • Trackable liquid waste according to Protection of the Environment Operations (Waste) Regulation 2005 Schedule 1 Waste to which waste tracking requirements apply • Non-trackable liquid waste.
Step 3: If not liquid, has the waste already been pre-classified by the NSW EPA?	The EPA has pre-classified several commonly generated wastes in the categories of hazardous, general solid waste (putrescibles) and general solid waste (non-putrescibles). If a waste is listed as 'pre-classified', no further assessment is required.
Step 4: If not pre-classified, is the waste hazardous?	If the waste is not special waste (other than asbestos waste), liquid waste or pre-classified, establish if it has certain hazardous characteristics and can therefore be classified as hazardous waste. Hazardous waste includes items such as explosives, flammable solids, substances liable to spontaneous combustion, oxidizing agents, toxic substances and corrosive substances.
Step 5: If the waste does not have hazardous characteristics, undertake chemical assessment to determine classification.	If the waste does not possess hazardous characteristics, it needs to be chemically assessed to determine whether it is hazardous, restricted solid or general solid waste (putrescible and non-putrescible). If the waste is not chemically assessed, it must be treated as hazardous. Waste is assessed by comparing Specific Contaminant Concentrations (SCC) of each chemical contaminant, and where required the leachable concentration using the Toxicity Characteristics Leaching Procedure (TCLP), against Contaminant Thresholds (CT).
Step 6: Is the general solid waste putrescible or non-putrescible?	If the waste is chemically assessed as general solid waste, a further assessment is available to determine whether the waste is putrescible or non-putrescible. The assessment determines whether the waste is capable of significant biological

Classification Step	Description
	transformation. If this assessment is not undertaken, the waste must be managed as general solid waste (putrescible).

The construction aspects and types of wastes, which may be generated during construction of the Stage 1 Airport Development are outlined with classifications in **Table 14**.

Table 14: Stage 1 Airport Development Classification of Potential Waste Streams

Aspect	Waste Types	Waste Classification	BEC Likely Quantity (completed)	Terminal Likely Qty	M12Likely Qty	Airside Likely Qty	Landside Likely Qty	Stage 1 Cargo Works Qty	Final Location and Transport Operator
Demolition/ Site Clearing	Vegetation (logs, mulched timber, weeds)	Timber and green waste	65,500T	300 m^3	0	0	N/A	N/A	To be determined and recorded within Waste Register LCB: To be managed onsite
	Demolition materials	General solid waste	3,000T	0	0	0	N/A	N/A	To be determined and recorded within Waste Register LCB: To be managed onsite
Bulk Earthworks	Excess material from excavations	Excavated Natural Material	To be reused onsite, where possible	0	0	0	To be reused in site	N/A	Minimal excess is anticipated LCB: To be managed onsite
	Piling	Likely to be General solid waste, (Potential for reuse onsite)	3,500T	100m3	0	0	To be reused in site	Material planned to be reused onsite	To be determined and recorded within Waste Register ACP: material planned to be reused onsite LCB: To be managed onsite Cargo: material planned to be reused onsite
	Unknown (Potentially Contaminated Soils)	Classification will be carried out in accordance with the EPA *Waste Classification Guidelines: Parts 1 and 2*	TBD based on the unexpected find.	Only unexpected finds procedure.	0	Only unexpected finds.	Remedial works done by BEC	Only unexpected finds	To be determined and recorded within Waste Register

Aspect	Waste Types	Waste Classification	BEC Likely Quantity (completed)	Terminal Likely Qty	M12Likely Qty	Airside Likely Qty	Landside Likely Qty	Stage 1 Cargo Works Qty	Final Location and Transport Operator
		(EPA 2014) following the process set out in Table 10. Works must be undertaken to demonstrate that remediation on-site for either retention or re-use or reduction in classification have been completed prior to off-site disposal							ACP: Onsite encapsulation or disposal at a Western Sydney Licenced waste facility Cargo: Onsite encapsulation or disposal at a Western Sydney Licenced waste facility
Road works	Rubble, rock, sand, asphalt, road base, concrete	General Solid Waste (non-putrescible)	2,000	2,200T	400m^3	Material will primarily be reused onsite where possible.	1,500 t	Material will primarily be reused onsite where possible	To be determined and recorded within Waste Register, majority to be recycled ACP: Concrete sent to western Sydney concrete recycling Cargo: Concrete sent to Western Sydney concrete recycling facility
General	Sewerage	Effluent (sewerage)	160T/Month	400 T/month	0	3,358 t	140 t/month	6,517 t	To be determined and recorded within Waste Register ACP: Branstar Cargo: Licenced waste facility
	Office waste	General solid waste (putrescible)	2.5T/Month	4T/month	2.5T	136 t	2 t/month	29 t	To be determined and recorded within Waste Register ACP: Bingo

Aspect	Waste Types	Waste Classification	BEC Likely Quantity (completed)	Terminal Likely Qty	M12Likely Qty	Airside Likely Qty	Landside Likely Qty	Stage 1 Cargo Works Qty	Final Location and Transport Operator
									Cargo: Licenced waste facility
		Comingled Recycling	0.2T/Month	1.3T/month	0	2.88 t	0.2 t/month	3.72 t	To be determined and recorded within Waste Register ACP: Bingo Cargo: Licenced waste facility
		Paper and Cardboard	0.2T/Month	1.5 T/month	0	187 t	0.2 t/month	137 t	To be determined and recorded within Waste Register ACP: Bingo Cargo: Licenced waste facility
	Construction Waste, incl timber, glass, masonry, steel, metal, cardboard and packaging	General Solid Waste (non-putrescible)	200T/Month	225T/month	8,500T	1270 t	100 t/month	2,195 t	To be determined and recorded within Waste Register ACP: Bingo & various Cargo: Licenced waste facility
Asbestos waste	Asbestos contaminated material	Special Waste (Asbestos Waste)	500,000m^3	Only unexpected finds procedure	0	0 – unexpected finds only	Remedial works done by BEC	Unexpected finds only	To be managed onsite ACP: Onsite encapsulation or disposal at a Western Sydney Licenced waste facility. Cargo: Onsite encapsulation or disposal at a Western Sydney

Aspect	Waste Types	Waste Classification	BEC Likely Quantity (completed)	Terminal Likely Qty	M12Likely Qty	Airside Likely Qty	Landside Likely Qty	Stage 1 Cargo Works Qty	Final Location and Transport Operator
									Licenced waste facility
Testing & Commissioning	Aviation Fuel	Liquid waste	-	5ML					To be determined and recorded within Waste Register

7.2 Reuse, Recovery and Recycling

Waste separation and segregation will be promoted on-site to facilitate reuse and recycling across all packages. All waste will be managed in accordance with the NSW *Protection of the Environment Operations (Waste) Regulation 2014*. Residual waste that cannot not be avoided, reduced, reused, recycled, recovered or treated will be collected by a licensed contractor for disposal at an appropriately licensed facility.

Measures to avoid and reduce waste during construction will include:

- Efficient utilisation of resources to reduce consumption;
- Optimisation of detailed designs to avoid unnecessary resource consumption;
- Implementation of high efficiency water systems to reduce water consumption;
- Procurement policies that preference recyclable, minimal and/or returnable packaging; and
- Procurement of necessary materials in bulk to minimise packaging waste;
- For office specific processes and procedures refer to WSA Green Office Guidelines

Measures to reuse, recycle and recover waste during construction will include:

- Reuse of green waste and topsoil for site landscaping; such as all topsoil remains and onsite and is reused;
- Reuse of excess or contaminated soils where they have been demonstrated to be suitable for re-use in accordance with RAP or other relevant guidance;
- Reuse of waste streams including metals, oils and solvents wherever possible, however, due to quality requirements this will need to be facilitated offsite by Contractors' Waste Service Providers;
- Recycling of waste streams including concrete, brickwork, metals, plasterboard, plastics and timber; which will be recycled offsite by dedicated Waste Service Providers.
- Contractors are to ensure that where soils/spoils required disposal to a licenced facility, that all measures have been undertaken to achieve the lowest waste classification in accordance with the NSW EPA 2014 Waste Classification Guidelines;
- Reuse of formwork sheets and false-work for concrete structures;
- Contractors are to ensure there are contract terms with suppliers that specify recyclable content and returnable packaging;
- Contractor co-operation in stewardship programs for compatible waste streams including pallet;
- Measures to recover and treat waste will include recovery (prior to reuse) of compatible waste streams including metals, oils, solvents, brickwork, plasterboard, plastics and timber. Waste recovery will be managed by Package Contractors, facilitated by their Waste Service Provider. A part of Contractors waste management responsibilities includes waste to destination auditing to ensure waste recovery is being conducted as reported in monthly waste reporting;
- All waste removed from site is sent to Material Sorting Facilities (MSF's), where resource streams are segregated and sent on to appropriate recovery services. Hazardous wastes or asbestos identified during construction would be managed consistently with the *NSW Protection of the Environment Operations (Waste) Regulation* 2014; and
- As part of the Fuel Farm commissioning process, aviation fuel will need to be passed through the entire system and then removed and disposed as liquid waste from possible construction contaminants. This is a requirement to ensure the safety and quality of future aviation fuel supplied to aircrafts.

Measure to sperate and segregate waste during construction include:

- Earthworks waste materials such as spoil waste will be separated onsite into dedicated areas for either reuse/retention/remediation onsite or collection by a waste contractor and transport to offsite facilities;

  Construction waste such as concrete, steel, metal, timber, glass, masonry and plastics will be deposited into one bin, and the waste is to be sorted offsite by a waste contractor;'

7.3 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 apply:

- Spoil, topsoil and mulch are to be stockpiled onsite in allocated areas, where appropriate, and mitigation measures for dust control and surface water management will be implemented as per the RAP 2019, the Air Quality CEMP, the Soil and Water CEMP and this Plan;
- Liquid wastes are to be stored in appropriate containers in bunded areas until transported offsite. Bunded areas will have the capacity to hold 110 per cent of the liquid waste volume for bulk storage or 120 per cent of the volume of the largest container for smaller packaged storage;
- Hazardous waste will be managed by appropriately qualified and licensed contractors, in accordance with the requirements of the *Environmentally Hazardous Chemicals Act 1985* and the NSW EPA waste classification guidelines;
- All other recyclable or non-recyclable wastes are to be stored in appropriate covered receptacles (e.g. bins or skips) in appropriate locations onsite and sub-contractors commissioned to regularly remove/empty the bins to approved disposal or recycling facilities; and
- Where suitable material is received by WSA or the Contractor for beneficial reuse on the Project, prior to importing the materials to the site the supplier must provide information on the material that concentrations of potential contaminants are below relevant NEPM criteria or an applicable EPA waste or resource recovery orders/exemption and a notice under Section 143 of the POEO Act to transport the waste received.

Monitoring of the above waste handling and storage strategies will be undertaken primarily through the implementation of environmental inspections to be undertaken by both the Contractor and WSA as detailed further in Section 9.

7.4 Waste Disposal

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.

Waste management facilities situated in the Western Sydney region will be utilised for reuse, recycling, recovery and treatment of waste generated at the airport. Waste must not be planned to be and/or disposed outside of NSW without prior approval by WSA and in accordance with the *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998*.

Wastes that are unable to be reused, recycled, or retained will be disposed of offsite to a NSW EPA approved waste management facility following classification in accordance with the POEO Act and the WARR Act.

Recyclable materials that have been separated at source (cardboard, glass and other containers, food organics) could be collected by waste contractors and taken to facilities specifically designed to either consolidate them for transportation to reprocessing facilities, or to sort them for transportation to such facilities. Non-recyclable wastes could be taken to transfer stations, or direct to landfills or to alternate waste processing facilities for disposal or treatment respectively.

All contractors will utilise waste management facilities situated in the Western Sydney region for reuse, recycling, recovery and treatment of waste generated at the airport. Transporters and waste facilities cannot be confirmed prior to CEMP approval. The final location (disposal destination) is to be determined and recorded within each Contractor’s Waste Register during construction.

Waste will not be disposed outside of NSW without prior approval by WSA, which will engage with the NSW EPA when making a determination.

7.5 Energy Conservation

WSA is dedicated to implementing energy conservation best practice and the reduction of greenhouse gases by adopting energy efficient work practices including:

- Developing and implementing procedures to minimise energy use; refer to WSA Green Office Guidelines;
- Conducting awareness programs for all site personnel regarding energy conservation methods. Specifically;
  - Energy efficient design of site buildings;
  - Design of construction work sites to minimise unnecessary vehicle movement;
  - Assess energy (fuel/electricity) efficiency when selecting equipment
  - Regular servicing of site plant and equipment; and
  - Use of locally sourced material where available and of suitable quality.
- Detailed requirements related to energy conservation are included the WSA Sustainability Plan, including requirements for meeting IS and Green Star Rating energy credits.

7.6 Contaminated Materials

Construction of the Stage 1 Airport Development has the potential to interact with existing sources of potential contamination. Construction will also involve the storage, treatment and/or handling of fuel, sewage and other potential contaminants.

The remediation of asbestos and chemical contamination present on the site due to historical land use practices will continue be undertaken in accordance with the Remediation Action Plan (RAP) 2019. The RAP enables the achievement of site suitability via the mechanism of capping, containment and long-term management.

The implementation of the RAP allows for asbestos material to be retained in situ where it is observed at depth or placed in areas that require filling to achieve final levels. Included in the decision-making process is the end land use for the airport site such as air side and land side locations as well as geotechnical properties of the material. All contamination that is to remain in situ or placed in fill, the extent of such material would be surveyed and detailed in the Long-Term Environmental Management Plan (LTEMP) in accordance with Section 11 of the RAP. The Long-Term Environmental Management Plan once developed, will be implemented by onsite contractors where applicable.

Remediation works have been completed onsite and validation is underway to demonstrate the objectives of the RAP have been achieved. The independent site auditor will issue a Site Audit Statement declaring the site has met these objectives and is suitable for commercial and industrial land use under the NEPM. Once this has been achieved, the LTEMP take effect and will be implemented onsite. The purpose of the LTEMP outlines areas that require long term management where ACM was contained onsite, in accordance with relevant guidelines. The LTEMP outlines management procedures in accordance with relevant categories and includes the unexpected finds protocol. The procedures must be adopted by workers during ground disturbance activities to minimise the potential for exposure to residual ACM in the soil.

Remediation works during the Stage 1 Airport Development will be primarily undertaken during the earthworks programs. Unless otherwise advised, during subsequent construction activities, Contractors will be required to adopt an unexpected finds protocol to manage any unexpected finds of contamination encountered during their activities. The assessment criteria for onsite reuse and validation are outlined in detail in the RAP (GHD 2019). The RAP also sets out the requirements for the classification of materials requiring disposal off-site and these requirements are consistent with those set out in this plan.

7.7 Imported Material Management

All project contractors must ensure that materials to be imported onto the site (including across project contractor's site boundary) satisfy the requirements of the RAP and LTEMP including the following criteria:

- virgin excavated natural materials (VENM) such as natural clays, gravel, sand, soil or rock fines;
- material with suitable EPA waste exemption/order or meet the excavated natural material (ENM) requirements;
- materials excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, resulting from industrial, commercial, mining or agricultural activities;
- materials that do not contain any sulfidic ores or soils or any other waste;
- topsoil growing media, mulch etc for landscaping purposes, free of foreign substances, staining and/or odours; and
- materials that do not contain marine mud, peat, vegetation, timber, organics, soluble or perishable elements; dangerous or toxic material; metal, rubber or plastics; and construction / demolition debris.

Appropriate certification documentation will be provided to the WSA Environment Team, prior to the importation of material/s onto the Airport Site.

All project contractors must maintain an imported material tracking register and a waste material tracking register, to record the type, amount and location of material/waste imported, reused, recycled, stockpiled and disposed of (including for Temporary Works).

The imported materials tracking records must include the following details and all validation in accordance with the Remediation Action Plan:

- type of imported material and its classification (according to the POEO Act and NSW EPA waste classification guidelines and AEPRs;
- quantities of imported material measured in tonnes;
- how and where the imported material was stockpiled, used or disposed of;
- date when the waste or imported material was stockpiled, used or disposed of;
- name and licence of the suppler used; and
- certification for the imported materials must be provided to WSA for approval no less than two weeks prior to planned importation.

An Imported Materials Tracking Register and Waste Tracking Register (refer Appendix A) are to be provided monthly, as part of the Contractor's performance report.

The Flow Chart of Works and Responsibilities for Imported Materials can be found in the SEMF Appendix V – Material Import Procedure

For further details, refer to the SEMF Appendix V – Material Import Procedure and Appendix T - Material Import Approval Form.

7.8 Waste Management Hierarchy

Waste management on the Project will be aligned with the NSW Waste and Sustainable Material Strategy and NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (EPA, 2014a) under the NSW WARR Act. The Strategy sets objectives to avoid waste generation, increase recycling, divert waste from landfill, manage problem waste, reduce litter and reduce illegal dumping. The Strategy also elaborates on a waste management hierarchy which supports the objectives of the WARR Act (refer Figure 2).

Under the waste management hierarchy, it is preferable to avoid or reduce waste by procuring only necessary materials, and consuming material with limited production or packaging requirements. Reusable or recyclable materials should be considered where waste cannot be avoided. If waste cannot be reused or recycled, efforts should be made to recover energy to maximise its beneficial use propriety to its eventual disposal. Waste with harmful characteristics should be treated prior to disposal to minimise its potential to affect human health and the environment.

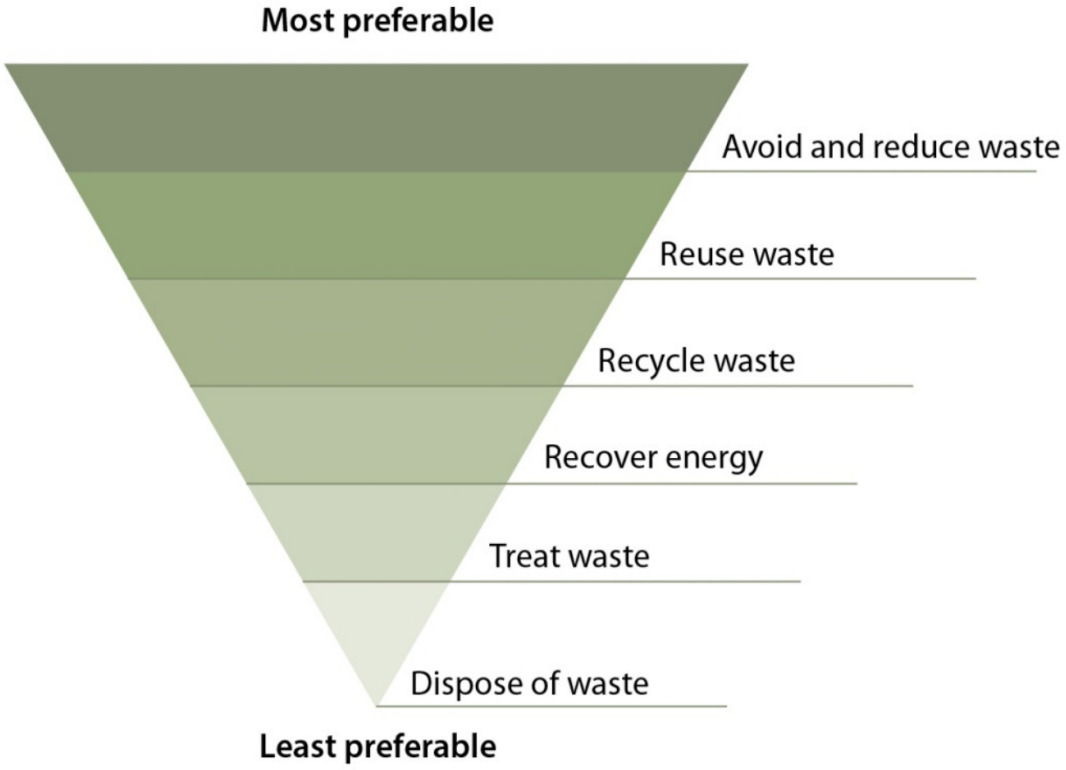

Figure 2: Waste Management Hierarchy, (NSW EPA, 2014a)

7.9 Waste Exemptions

Clause 92 of *the Protection of the Environment Operations (Waste) Regulation 2014* enables the NSW EPA to grant exemptions to the licensing and payment of levies for the land application or use of waste.

- Resource recovery orders include conditions that generators and processors of waste must meet to supply the waste for land application, use as fuel or in connection with a process of thermal treatment. They may include specifications, record keeping, reporting and other requirements.
- Resource recovery exemptions contain the conditions which consumers must meet to apply waste to land or use waste as fuel or in connection with a process of thermal treatment outside of certain requirements of the waste regulatory framework. They may include specifications, requirements on how to re-use or apply the waste, record keeping, reporting and other requirements.

The general orders/exemptions are applicable for a range of commonly recovered, high volume and well characterised waste materials that allow their use as fill or fertiliser at unlicensed, off-site facilities.

The NSW EPA has issued general exemptions for a range of commonly recovered, high volume and well characterised waste materials that allow their use as fill or fertiliser at unlicensed, off-site facilities. These are general gazette exemptions that do not require approval. A specific exemption may be granted where an application is made to the NSW EPA.

Where waste materials are to be removed from site, a review of the applicable NSW EPA waste exemptions will be undertaken to determine if the material classifies as specific exemption and if a suitable receiving site can be identified.

8. Environmental Roles and Responsibilities

The key environmental management roles and responsibilities for the construction phase of the work are detailed in Section 4.4 of the SEMF.

WSA will ensure enough resources are allocated on an ongoing basis to ensure effective implementation by both WSA and the responsible contractors.

The Airport Environment Officer (AEO) will be responsible for day-to-day regulatory oversight of the AEPR compliance at WSI after an Airport Lease is granted.

The roles and responsibilities for the management of asbestos as required by the RAP and LTEMP are detailed in **Table 15**.

Table 15: Roles and Responsibilities for the Management of Asbestos

Roles	Responsibilities	Prep Activities	Material Import	Main Works
Contractors	Responsible for undertaking the remediation works as defined in the RAP and LTEMP and securing all relevant approvals required to undertake the works.	x		x
	Responsible for implementing an Unexpected Finds Protocol to manage any unexpected identification of contamination.	x		x
Licenced Asbestos Removalist	Engaged by the Contractor when asbestos is required to be removed, handled, managed or otherwise disturbed. Competent and experienced in identifying asbestos and licenced as Class A and/or Class B, as required, in accordance with the requirements of SafeWork Australia and SafeWork NSW. They will work closely with the Licenced Asbestos Assessor/hygienist in accordance with the RAP/LTEMP (as applicable) and will be responsible for ensuring that asbestos removal works are undertaken in accordance with all relevant codes of practices, regulations and legislation.	x		x
Licenced Asbestos Assessor and Hygienist	Engaged by the Contractor when asbestos is required to be removed, handled, managed or otherwise disturbed. Competent and experienced in identifying asbestos in accordance with the requirements of SafeWork Australia and SafeWork NSW. They will work closely with the Licenced Asbestos Removalist in accordance with the RAP/LTEMP (as applicable) and will be responsible for undertaking air monitoring, risk assessment for works with asbestos, assessment of condition of asbestos and issue of clearance certificates for visual presence of asbestos on surfaces as part of the works for the site.	x		x
Site Auditor	Accredited by the NSW EPA and will undertake an independent non-statutory review of all relevant environmental reports prepared for the remediation of the site. The Site Auditor will prepare a Site Audit Report (SAR) and Site Audit Statement (SAS) confirming the suitability of the site for its intended use.	x	x	x
WSA Environmental Advisor	Suitably qualified and competent environmental consultant who has specific demonstrated experience in the type of remediation set out in the RAP. Their role is to provide independent, technical advice, technical direction and validation of the remediation and to document that all remediation works undertaken at the site are conducted to the satisfaction of WSA and the Site Auditor. Upon receipt of the Site Audit Statement the role of the WSA Environmental Advisor is not applicable.	x	x	x
WSA Environment Team	Ensure compliance for environmental management and remediation of the site.	x	x	x
WSA Design Team/ALC	Approves the location is suitable for the placement of material based on the land use.	x		x

9. Environmental Inspection, Monitoring Auditing and Reporting

Monitoring, inspection, auditing and reporting will be undertaken to measure the effectiveness of the implementation of this Plan and to facilitate continuous improvement of waste and resource management.

General environmental monitoring, inspection, auditing and reporting requirements are summarised in Section 8 of the SEMF.

A summary of the environmental inspection, monitoring, auditing and reporting requirements is provided below, with details of how they apply to the management of waste and resources where applicable.

9.1 Environmental Inspections

9.1.1 WSA Environmental Inspections

Environmental site inspections at active work sites will be undertaken by the WSA Environment Manager (or delegate) on a weekly basis to evaluate the effectiveness of environmental controls implemented by the contractor.

The site inspection is to include a visual check of general construction activities and any management measures associated with waste and resources, including but not limited to the following:

- Observation of waste segregation and separation to ensure the waste management hierarchy is being effectively implemented;
- Ensuring that opportunities for material / waste reuse on site are being investigated and implemented where practical;
- Observation of general housekeeping standards, including the presence (if any) of waste on the ground;
- Ensuring that waste receptacles are being managed appropriately, and that they are being emptied regularly as required to ensure no overspill of waste; and
- Observation of machinery and plant usage, ensuring that where appropriate engines are switched off to avoid unnecessary resource consumption.

The findings of the WSA site environmental inspection will be recorded on a WSA Site Environmental Inspection Checklist with an accompanying photographic style inspection report.

Refer to Appendix K of the SEMF for further details with regards to completing the Site Environmental Inspection Checklist.

9.1.2 Contractor Environmental Inspections

Weekly site inspections will be undertaken to monitor compliance with this plan at active work sites. Inspection results will be recorded, and the inspection log made available to the Infrastructure Department upon request. Any non-conformance or improvement opportunity associated with the management of waste and resources will be documented in the monthly report and discussed at the Environmental Coordination meeting.

More frequent site inspections by the person accountable for waste and resource management will be conducted onsite when activities with a high potential to generate a high volume or sensitive waste type or utilise a high volume / quantity of resources will be carried out.

The Contractor's Environmental Manager and/or Environmental Coordinators will undertake inspections in accordance with the Contractor Environmental Management Framework. The Contractor's Environmental Coordinators will record inspection findings on an inspection checklist form.

If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded on the checklist form. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority.

9.1.3 Pre-start Inspection

Prior to the commencement of works on each shift, an informal inspection will be carried out by the relevant contractor and will include a check of relevant environmental controls and resources required to ensure effective operation and maintenance. This is to include an inspection of relevant waste and resource management mitigation measures and controls where applicable. Works are not to commence unless inspections are found to be satisfactory.

The Foreman will undertake the pre-work inspections and record the findings.

9.2 Waste and Resource Monitoring

General environmental monitoring requirements are set out in the AEPR include the following:

- Monitoring must take place under the direction of an appropriately qualified person; and
- The results of the monitoring must be kept in a written record.

Specific waste and resource monitoring requirements, including timing and responsibilities, are included in **Table 16**.

Table 16: Waste and Resources Monitoring Requirements

Reference	Requirement	Timing	Responsibility
WR_M_01	All waste material generated on the Airport Site and resources used are to be tracked and classified to meet the requirements of the sustainability targets outlined in the Sustainability Plan when approved. Waste tracking is to include volumes / quantities disposed, reused and recycled. An example waste tracking register is included in Appendix A.	During construction	All Contractors

Where a non-conformance or an improvement opportunity is identified, the non-conformance and improvement opportunity process described in the SEMF Section 8 will be implemented.

9.3 Environmental Auditing

Refer to Section 8.2 of the SEMF for environmental auditing requirements, including internal WSA audits, independent audits and audits to be undertaken by contractors.

Auditing and subsequent reporting will be undertaken annually to ensure compliance with this Waste and Resources CEMP and Airport Plan Conditions of Approval, as identified in Section 4 of this CEMP.

9.4 Environmental Reporting

General environmental reporting requirements are detailed in 8.3of the SEMF.

In addition, a summary of reporting requirements under this Waste and Resources CEMP (including environmental reporting requirements under the Airport Plan specific to this Waste and Resources CEMP) is provided in **Table 17**.

Table 17: Waste and Resources Reporting

Action	Scope	Timing / Frequency	Responsibility
Annual reporting	Unless otherwise agreed in writing by an Approver, an annual report will be prepared in relation to compliance with this Waste and Resources CEMP (Condition 47). In accordance with Condition 47 (2) WSA will publish each of the annual reports on its website within three months of the end of the period in respect of which	Annually	WSA Environment Manager

Action	Scope	Timing / Frequency	Responsibility
	the report was prepared, with evidence providing proof of the date of publication to the Infrastructure Department with a copy to the Environment Department. The report must remain on the website for a period of at least 12 months.		
Complaints reporting	Recording of complaints and stakeholder interactions	As required	WSA Community and Stakeholder Engagement Manager WSA Environment Manager All Contractors
Compliance reporting	Undertaking monitoring as required by this Waste and Resources CEMP. Contractor is to provide WSA with a monthly summary of all waste and resource monitoring undertaken and advise of compliance with criteria	Monthly	All Contractors
General environmental inspection	Inspection of environmental management controls on site and sighting of site documentation as required by the contractor's CEMP.	Weekly	WSA
General environmental inspection	Inspection of environmental management controls and site documentation for contractor works (as required by the contractor's CEMP).	As per Contractor environmental management system (at least weekly)	All Contractors
Reporting pollution incidents	For the management and reporting requirements of all environmental incidents, refer to section 6 of the SEMF. Report pollution incidents resulting in offsite impacts to the NSW Environment Protection Authority – refer to WSA Environmental Non-conformance Classification and Reporting Procedure.	As required	All
Reporting of non-conformances and improvement opportunities	The management and reporting requirements of environmental non-conformances and improvement opportunities will be in accordance with Section 8 of the SEMF.	As required	WSA All Contractor
Reporting and tracking of material	• A material tracking report must be prepared which records • the location, quantity and timing of material placed into stockpiles areas, • the movement of materials within site, including date, time, quantity, source location and placement location • materials imported onto the site; and • any material disposed offsite, including classification, EPL of destination waste facility, disposal dockets, date and time, disposal contractor details, consignment details	Monthly	All Contractors

9.5 Review of Approved Plans

As per the WSA EMS, review of all Approved Plans will be undertaken annually to ensure they continue to meet conditions set out in Section 3.11.2 of the Airport Plan (refer Condition 47). If the review identifies

areas where the plan does not continue to meet the approval criteria for that Plan, a variation to the Approved Plan will be prepared and submitted for approval.

Under Condition 49 (4) of the Airport Plan, WSA is also required to review each Approved Plan at least every five years (from the date of approval). Findings of this review will be included in the Annual Report (refer Section 8.3 of the SEMF) and if needed, a variation to the Approved Plan will be prepared and submitted for approval.

Additionally, WSA may initiate reviews of Approved Plans at other times in response to improvement opportunities, non-conformances, and changes to scope of work or construction methodology or alterations to legal or contractual requirements.

Any changes identified and implemented through the variation and review process identified above will be communicated to relevant contractors through re-issue of the revised WSA Approved Plan and subsequent training and awareness (refer Section 4 of the SEMF).

9.6 Environmental Incidents and Complaints Management

The management and reporting of environmental incidents shall be undertaken by the appropriate person as detailed in Section 6 of the SEMF.

All communications and complaints management will be implemented and managed in accordance with Section 7 of the SEMF and the CSEP.

10. Competence, Training and Awareness

To ensure this Waste and Resources CEMP is effectively implemented, each level of management is responsible for ensuring that all personnel reporting to them are aware of the requirements within. The WSA Environment Manager will coordinate the necessary and relevant environmental training in conjunction with other training and development activities.

All employees, contractors and utility staff conducting, work activities on site shall be required to undertake a site induction (or visitors induction) that includes construction waste and resource management risks and mitigation measures. The induction training should include: requirements of this CEMP, relevant regulations, incidents and non conformance responses (e.g. illegal dumping), waste classification, segregation etc.

All competence, training and awareness requirements will be implemented as detailed in Section 5 of the SEMF.

11. References

AS/NZS ISO 14001: 2016 *Environmental management systems – Requirements with guidance for use*

Commonwealth Department of Infrastructure and Regional Development, 2016. *Airport Plan* (*December 2016)*

Commonwealth Department of Infrastructure and Regional Development, 2016. *Airport Plan Western Sydney Airport, Variation 2 (September 2021)*

Commonwealth Department of Infrastructure and Regional Development, 2016. *Western Sydney Airport Environmental Impact Statement, 2016*

GHD (2019), *Western Sydney Airport Remediation Action Plan*, ref. 2126850, June 2019 (WSA00-WSA-00400-EN-PLN-000001)

NSW Environment Protection Authority, 2014. *Waste Classification Guidelines*

Appendix A Example Waste Management Tracking Register

Date / Time	Waste Classification	Description of waste (e.g. concrete, asphalt, vegetation)	Amount of spoil or waste collected/reused onsite	Transporter	Facility to receive	Waste Use (Reuse, Recycled, Stockpiled or disposed)	Invoice No / Tip Docket Ref

Appendix B Illegal Dumping Prevention Strategy

1. Introduction

This Illegal Dumping Prevention Strategy (IDPS) acts in support of the Waste and Resource Construction Environmental Management Plan (Waste and Resources CEMP) for the construction phase of the Western Sydney Airport Stage 1 Development.

1.1 Purpose

This plan has been prepared to address the requirements of Conditions contained in the Western Sydney Airport – *Airport Plan* (2016) (Airport Plan), the environmental mitigation and management measures listed in the *Western Sydney Airport Environmental Impact Statement* (EIS) and all applicable legislation.

The purpose of IDPS is to provide guidance for the implementation of potential strategies to minimise and managed illegal dumping during for the construction phase of the Western Sydney Airport Stage 1 Development.

1.2 Objectives

The key objective of the IDPS is to outline measures to be undertaken to minimise the risk of illegal dumping on the Project's site. The IDPS will be developed in consultation with the NSW Environmental Protection Authority and relevant local councils.

2. Environmental Requirements

2.1 Relevant legislation and guidelines

As the Western Sydney Airport is to be developed under the Airport Plan determined under the *Airports Act 1996*, some state laws will not be applicable to the Project (s112 of this Act). Where state law is applicable, these laws will be complied with including obtaining relevant permits. Where state laws are not applicable, there may nonetheless be a requirement to have regard to those laws, for example, through mitigation measures to satisfy conditions under the Airport Plan.

The following approaches and strategies were considered in this IDPS:

- The NSW Environment Protection Authority (EPA) - NSW Illegal Dumping Strategy, 2022-2027
- Liverpool City Council's illegal dumping web page information - https://www.liverpool.nsw.gov.au/council/Fees-Forms-Policies-and-Enforcement/enforcement/illegal-dumping
- Department of Environment & Climate Change NSW, *Crackdown on Illegal Dumping, Handbook for Local Government.*

2.2 Rationale for an illegal dumping prevention strategy

The Airport Plan requires the development of a Waste and Resources CEMP which meets the requirements of Chapter 28 of the EIS. The IDPS acts as a supporting document alongside the Waste and Resources CEMP to provide guidance on the issue specifically related to illegal dumping of material onto the Project's site during the undertaking of the works covered by this CEMP.

The mitigation and management measures in the EIS, Table 28-17, which are relevant to illegal dumping during construction are listed in Table B1.

Table B1 EIS requirement for Illegal Dumping Prevention Strategy

Requirement	Responsible
An illegal dumping prevention strategy will be developed as part of the Waste and Resources CEMP. The strategy will be outlined measures to be undertaken to minimise the risk of illegal dumping on the Airport Site and will be developed in consultation with the NSW Environment Protection Authority and relevant local councils.	WSA

3. Illegal dumping

The State of NSW and Environment Protection Authority (State of NSW and Environment Protection Authority , 2017) defines illegal dumping as:

"Illegal dumping is the disposal of any waste that is larger than litter to land or water without correct approvals (an environment protection licence or planning approval). It includes illegal landfilling, where waste, often from construction or demolition, is used as 'fill' without approval. It can damage the environment and our health and create unsightly community spaces and high clean-up costs."

3.1 Types of waste dumped

Examples of the types of waste illegally dumped include the following:

- General household waste;
- Mattresses;
- Furniture;
- Whitegoods;
- Green waste;
- Construction and demolition waste;
- Asbestos;
- Chemicals;
- Vehicles; and
- Tyres.

3.2 Reasons for illegal dumping

Depending on the type and quantity of the waste, people are motivated to illegal dump for the following reasons (State of NSW and Environment Protection Authority , 2017):

- Opportunity to make money;
- Unwillingness to pay;
- Convenience; and
- Uncaring attitude.

4. Illegal dumping mitigation and management measures

Specific mitigation and management measures to minimise the risk of illegal dumping on the Airport Site include the following:

4.1 Training and Awareness

- Raise community awareness of the effects of littering and illegal dumping by distributing illegal dumping awareness material such as pamphlets and posters;
- Provide training for staff personnel on lawful waste management practices and raise awareness of the impacts and penalties for illegal dumping;
- Engage with local councils on illegal dumping;
- Participate in community programs like Clean Up Australia Day; and
- Monitoring of site boundaries, fencing and other security measures to be undertaken on at least a weekly basis.

4.2 Prevention Techniques

- Install fencing, signage and security protocols early in the Project to demonstrate a secure presence of the site;
- Reduce volume of litter and waste produced at the Airport Site, where appropriate;
- Implement measures in the surrounding areas of the site where illegal dumping is anticipated to occur, including, but not limited to:
  - Signage
  - Lighting
  - Fences and locked gates
  - Landscaping and revegetation
  - Barriers (e.g. concrete blocks)
  - Consistent communication with local police
  - Surveillance.
- Provide support and promote the use of surveillance and prevention techniques by local councils and public land managers.

4.3 Clean-up of illegal dumping

Upon identification of illegal dumping the site hygienist and Contractors Environmental Manager will assess the material immediately and make safe where required with geofabric covering, signage and flagging;

If the material is identified to be hazardous it will be managed in accordance with the Remediation Action Plan which could include waste classification and removal from site by a licenced contractor;

The illegal dumping of materials, whether hazardous, or clean material, will be documented and submitted to the WSA Environmental Manager within 24 hours together with close out actions, as required.

4.4 Complaints

Investigate illegal dumping and littering complaints and report these to the appropriate authority.