This is a subordinate management plan to be used in conjunction with the Project Management Plan

Sydney Metro Package 5

Customer: Sydney Metro

Contract Number: Package 5: Punchbowl, Dulwich Hill, Campsie

Document Preparation and Control	Document Review
Geraldine Figueira – Environment and sustainability advisor	Amy Williams – Environment and Sustainability Manager
Document Approval	**Signature**
Kristo Bugarija – Project Director	

Project Document Code	Latest Version Number	Latest Version Date
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Document Version History

Version No.	Date	Document Status	Brief Description of Change(s) from Previous Version
00	13/11/2020	For Review	For External Consultation
01	18/01/2021	For Review	Revised in response to ER and internal comments
02	23/02/2021	Final	Revised in response to DPE comments
03	30/03/2021	For Review	Integrate Downer EMS
04	18/05/2021	For Review	Revised in response to ER and internal comments
05	11/08/2021	Final	Revised in response to Sydney Metro comments
06	23/02/2022	For Review	6 monthly update and incorporate revised risk assessment
07	23/03/2022	For Review	Update in response to comments from Sydney Metro and ER
07.1	15/09/2022	Final	6 monthly review – no update to the document required
07.2	20/03/2023	Final	6 monthly review – no update to the document required
07.3	26/09/2023	Final	6 monthly review. Update to Project Director and change from Downer to DT Infrastructure Pty Ltd

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Document Control

Title	Southwest Metro – Dulwich Hill, Campsie and Punchbowl Station Upgrades Construction Environment Management Plan
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Version Control

Revision	Date	Description
00	13 November 2020	For External Consultation
01	18 January 2021	Revised in response to ER and internal comments
02	23 February 2021	Revised in response to DPE comments
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07.2	20 March 2023	6 monthly review – no update to the document required
07.3	26 September 2023	6 monthly review. Update to Project Director and change from Downer to DT Infrastructure Pty Ltd

Terms and Definitions

Terms	Definitions
AARD	Archaeological Assessment and Research Design report
AS	Australian Standard
ASS	Acid Sulfate Soils
BC Act	Biodiversity Conservation Act 2016 (NSW)
CCS	Community Communication Strategy
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CNVIS	Construction Noise and Vibration Impact Statement
CoA	Conditions of Approval
CoCB	City of Canterbury-Bankstown Council
CSSI	Critical State Significant Infrastructure
CTMP	Construction Traffic Management Plan
CTR	Compliance Tracking Review
Cwth	Commonwealth
dB	Decibels
DECC	NSW Department of Environment and Climate Change
DPI	NSW Department of Primary Industries
DPE	Department of Planning and Environment
DTI	DT Infrastructure (previously Downer EDI)
EAP	Environmental Audit Program
ECM	Environmental Control Map
EES	NSW Environment, Energy and Science (formerly OEH)
EIN	Environmental Improvement Notice
EIS	Environmental Impact Statement
EP&A Act	Environment Planning and Assessment Act 1979 (NSW)
EPA	NSW Environment Protection Authority
EPBC Act	Environment Protection and Conservation Act 1999 (Cwth)
EPL	Environment Protection Licence under the POEO Act
EMS	Environmental Management System
EMP	Environmental Management Plan
EPO	Environmental Performance Outcome
ER	Environmental Representative
ESCP	Erosion and sediment control plan
EWMS	Environmental Works Method Statement
E&SMS	Environment and Sustainability Management System
FFMP	Flora and Fauna Management Plan
GREP	Government Resource Efficiency Policy
HMP	Heritage Management Plan

Terms	Definitions
ICNG	Interim Construction Noise Guideline
IMS	Integrated Management System (aligned to Sydney Metro and Downer/DTI)
ISO	International Standardization Organisation
KPI	Key Performance Indicator
LV	Low Voltage
Minister, the	The Minister of New South Wales (NSW) Planning
NML	Noise Management Level
NSW	New South Wales
NVMP	Noise and Vibration Management Plan
OCCS	Overarching Community Communication Strategy
OOHW	Out-of-Hour Works
PASS	Potential Acid Sulfate Soils
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
Proponent	The person or organisation identified as the proponent in Schedule 1 of the planning approval. In this case Sydney Metro Authority
QMP	Quality Management Plan
RBL	Rating Background Level
REMM	Revised Environmental Mitigation Measure
RMS	NSW Roads and Maritime Services
ROL	Road Occupancy Licence
SCO	Sydney Coordination Office
Planning Secretary	The Secretary of the Department of Planning and Environment
SDG	TfNSW Sustainable Design Guidelines (Version 4)
SM	Sydney Metro Authority
SMP	Sustainability Management Plan
SMSP6	Sydney Metro Stations Package 6
SPIR	Submissions and Preferred Infrastructure Report
SSI	State Significant Infrastructure
SWM	Southwest Metro
SWMP	Soil and Water Management Plan
SWMS	Safe Works Method Statement
TfNSW	Transport for New South Wales
UCM	Utilities Coordination Manager
VAMP	Visual Amenity Management Plan
WFDIP	Workforce Development and Industry Participation Plan

Construction Environmental Management Plan Compliance matrix

The Conditions of Approval (CoA) relevant to this Construction Environmental Management Plan (CEMP) are listed in Table 1. In accordance with CoA C1, the relevant requirements of the Sydney Metro City and Southwest Construction Environmental Management Framework (CEMF) have also been included in Table 1. This table also provides a cross reference to demonstrate where the relevant requirement is addressed in this CEMP, or other management documents.

Table 1 CEMP CoA compliance matrix

<table>
<tr><th>Condition</th><th>Condition Requirements</th><th>Document Reference</th></tr>
<tr><td colspan="3">Conditions of Approval SSI-8256</td></tr>
<tr><td>C1</td><td>A Construction Environmental Management Plan (CEMP) must be prepared in accordance with the Construction Environmental Management Framework (CEMF) included in the documents listed in Condition A1 to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1 will be implemented and achieved during Construction.</td><td>This document fulfils the requirements of C1.
The Compliance Matrix in Appendix A tracks these requirements.</td></tr>
<tr><td>C2</td><td>The CEMP must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one (1) month before the commencement of Construction.</td><td>Section 1.2</td></tr>
<tr><td>C3</td><td>The CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan and be consistent with the CEMF and CEMP referred to in Condition C1:
<table>
<tr><th>ID</th><th>Consultation required for CEMP Sub-plans</th><th>Relevant Government Agencies to be consulted for CEMP Sub-plans</th></tr>
<tr><td>a)</td><td>Noise and Vibration</td><td>Relevant Council(s)</td></tr>
<tr><td>b)</td><td>Soil and Water</td><td>Relevant council(s), DoI, OEH</td></tr>
<tr><td>c)</td><td>Waste and Spoil</td><td>Relevant council(s)</td></tr>
<tr><td>d)</td><td>Heritage</td><td>Heritage Council (or its delegate) and relevant council(s)</td></tr>
</table></td><td>Refer to relevant Sub-plans.

Note: in accordance with the Sydney Metro City & Southwest - Sydenham to Bankstown Staging Report a Waste and Spoil Sub-plan is not required. As such, consultation in accordance with C3(c) is not required.
Waste and Spoil is addressed within a procedure, refer to Appendix E.</td></tr>
<tr><td>C4</td><td>The CEMP Sub-plans must be prepared in accordance with the CEMF.</td><td>Refer to the Project’s Noise and Vibration Management Plan, Soil and Water Management Plan and Heritage Management Plan.</td></tr>
<tr><td>C5</td><td>Details of all information requested by an agency to be included in a CEMP Sub-plan as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant CEMP Sub-Plan</td><td>Refer to the Project’s Noise and Vibration Management Plan, Soil and Water Management Plan and Heritage Management Plan.</td></tr>
<tr><td>C6</td><td>Any of the CEMP Sub-plans may be submitted along with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before Construction.</td><td>Section 1.2</td></tr>
<tr><td>C7</td><td>Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The</td><td>Section 1.2</td></tr>
</table>

<table>
<tr><th>Condition Reference</th><th>Condition Requirements</th><th>Document Reference</th></tr>
<tr><td></td><td>CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of Construction. Where Construction of the CSSI is staged, Construction of a stage must not commence until the CEMP and CEMP Sub-plans for that stage have been approved by the Planning Secretary</td><td></td></tr>
<tr><td>C8</td><td>The following Construction Monitoring Programs must be prepared in consultation with the relevant government agencies identified for each to compare actual performance of Construction of the CSSI against the predicted performance.
<table>
<tr><th>ID</th><th>Consultation required for Construction Monitoring Programs</th><th>Relevant Government Agencies to be consulted for Construction Monitoring Programs</th></tr>
<tr><td>a)</td><td>Noise and Vibration</td><td>Relevant Council(s)</td></tr>
<tr><td>b)</td><td>Water Quality</td><td>Relevant council(s)</td></tr>
</table></td><td>Refer to the Project’s Noise and Vibration Management Plan and Soil and Water Management Plan.</td></tr>
<tr><td>C9</td><td>Each Construction Monitoring Program must provide:
a) details of baseline data available;
b) details of baseline data to be obtained and when;
c) details of all monitoring of the project to be undertaken;
d) the parameters of the project to be monitored;
e) the frequency of monitoring to be undertaken;
f) the location of monitoring;
g) the reporting of monitoring results;
h) procedures to identify and implement additional mitigation measures where results of monitoring are unsatisfactory; and
i) any consultation to be undertaken in relation to the monitoring programs.</td><td>Refer to the Projects’ Noise and Vibration Management Plan and Soil and Water Management Plan.</td></tr>
<tr><td>C10</td><td>The Construction Monitoring Programs must be developed in consultation with relevant government agencies as identified in Condition C8 of this approval and must include reasonable information requested by an agency to be included in a Construction Monitoring Programs during such consultation. Details of all information requested by an agency including copies of all correspondence from those agencies, must be provided with the relevant Construction Monitoring Program.</td><td>Refer to the Project’s Noise and Vibration Management Plan and Soil and Water Management Plan.</td></tr>
<tr><td>C11</td><td>The Construction Monitoring Programs must be endorsed by the ER and then submitted to the Planning Secretary for approval at least one (1) month before the commencement of Construction.</td><td>Refer to the Project’s Noise and Vibration Management Plan and Soil and Water Management Plan.</td></tr>
<tr><td>C12</td><td>Construction must not commence until the Planning Secretary has approved all of the required Construction Monitoring Programs.</td><td>Refer to the Project’s Noise and Vibration Management Plan and Soil and Water Management Plan.</td></tr>
<tr><td>C13</td><td>The Construction Monitoring Programs, as approved by the Planning Secretary including any minor amendments approved by the ER must be implemented for the duration of Construction and for any longer period set out in the monitoring program or specified by the Planning Secretary, whichever is the greater.</td><td>Refer to the Project’s Noise and Vibration Management Plan and Soil and Water Management Plan.</td></tr>
<tr><td>C14</td><td>The results of the Construction Monitoring Programs must be submitted to the Planning Secretary, and relevant regulatory agencies, for information in the form of a Construction Monitoring Report at the frequency identified in the relevant Construction Monitoring Program.</td><td>Refer to the Project’s Noise and Vibration Management Plan and Soil and Water Management Plan.</td></tr>
</table>

Condition Reference	Condition Requirements	Document Reference
C15	Where a relevant CEMP Sub-plan exists, the relevant Construction Monitoring Program may be incorporated into that CEMP Sub-plan.	Refer to the Project's Noise and Vibration Management Plan and Soil and Water Management Plan.

Table 2 CEMP CEMF compliance matrix

Clause	Requirement	Document Reference
Construction Environmental Management Framework		
3.3 (a)	Principal Contractors are required to prepare and implement a Construction Environmental Management Plan (CEMP) relevant to the scale and nature of their scope of works. The CEMP shall comprise of a main CEMP document, issue specific Sub-plans, activity specific procedures and site-based control maps. The CEMP shall illustrate the relationship between other plans required by the contract, in particular those that relate to design management.	This Plan
3.3 (b)	Depending on the scope and scale of the works, TfNSW may decide to streamline the CEMP and Sub-plan requirements. For example, depending on the risk associated with particular environmental issues it may be appropriate to remove the need for a sub plan, or replace with a procedure as part of the CEMP.	Section 1.2 Refer to the Sydenham to Bankstown Staging Report
3.3 (c)	The CEMP will cover the requirements of the relevant planning approval documentation, the conditions of all other permits and licences, the Principal Contractor's corporate EMS, the environmental provisions of the contract documentation and this Construction Environmental Management Framework.	Section 2 This Plan
3.3 (d)	As a minimum the CEMP will:	
(i)	Include a contract specific environmental policy;	Section 1.3 and Appendix D
(ii)	Include a description of activities to be undertaken during Construction;	Section 1.1
(iii)	For each plan under the CEMP include a matrix of the relevant Conditions of Approval or Consent referencing where each requirement is addressed;	Refer to relevant Sub-plan
(iv)	For each plan under the CEMP, set objectives and targets, and identify measurable key performance indicators in relation to these;	Section 1.4 and relevant Sub-plans
(v)	For each role that has environmental accountabilities or responsibilities, including key personnel, provide a tabulated description of the authority and roles of key personnel, lines of responsibility and communication, minimum skill level requirements and their interface with overall project organisation structure;	Section 3.3
(vi)	Assign the responsibility for the implementation of the CEMP to the Environment Manager, who will have appropriate experience. The Principal Contractor's Project Director will be accountable for the implementation of the CEMP;	Section 3.3
(vii)	Identify communication requirements, including liaison with stakeholders and the community;	Overarching Sydney Metro Community Communication Strategy

Clause	Requirement	Document Reference
(viii)	Include induction and training requirements and a summary of the Training Needs Analysis required in Section 3.9(b)	Section 3.5
(ix)	Management strategies for environmental compliance and review of the performance of environmental controls;	Sections 0, 3.16 and 3.17
(x)	Processes and methodologies for surveillance and monitoring, auditing and review, and reporting on environmental performance including environmental compliance tracking;	Section 3.9
(xi)	Include procedures for emergency and incident management, non-compliance management, and corrective and preventative action; and	Section 3.8 and 0
(xii)	Include procedures for the control of environmental records.	Section 3.15
3.3 (e)	The CEMP and associated Sub-plans will be reviewed by TfNSW and/or an independent environmental representative (see Section 3.11) prior to any Construction works commencing. Depending on the Conditions of Approval, the CEMP and certain Sub-plans may also require the approval of the Department of Planning and Environment (DPE).	Section 1.2
3.3 (f)	Where a corresponding systems document exists within the Sydney Metro Integrated Management System, the Principal Contractor's procedures will be required to be consistent with any requirements in those documents.	This plan and supporting documents have been written to meet the Sydney Metro project requirements.

Please refer to Appendix A for all other CoA, REMM and CEMF requirements relevant to the development of this Plan.

1. Introduction

Sydney Metro is Australia's biggest public transport project. The network will deliver 31 metro stations and more than 65km of new metro rail. The Sydney Metro Network will provide opportunities to lead the transformation of Sydney's urban environment and support transit orientated development connecting Sydney's Central Business District to vibrant and attractive places across the Greater Sydney Region. The Sydney Metro Network will link Sydney's three Metropolitan centres and introduce the necessary step change in rail infrastructure to ensure, the NSW Government's aim of 30-minute cities as defined in Future Transport Strategy 2056.

The Sydney Metro Network has currently two core corridors, the Northwest Corridor and City and Southwest Corridor, with a further six corridors proposed as shown in Figure 1.

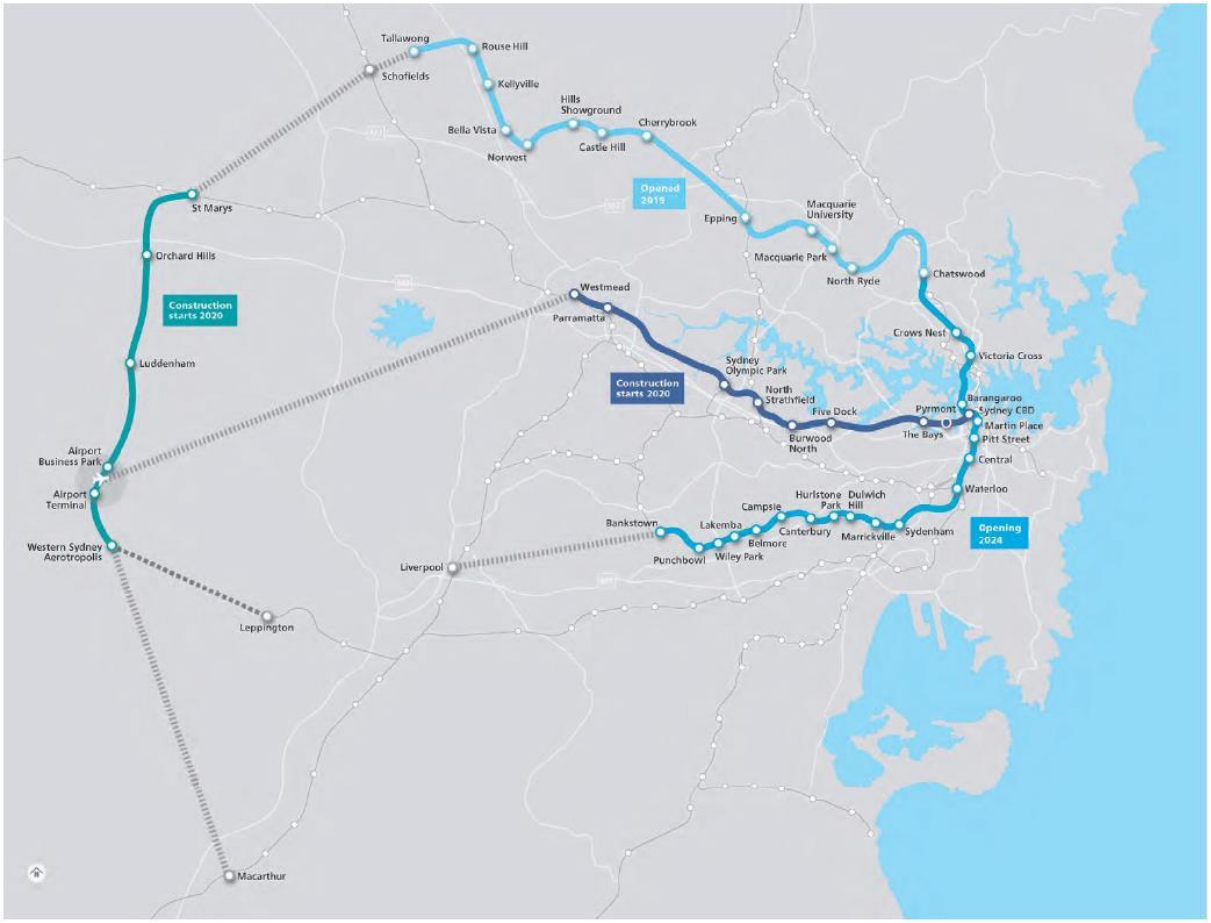

Figure 1 Sydney Metro route map

The Sydney Metro City & Southwest project includes a new 30km metro line extending metro rail from the end of the Metro North West Line at Chatswood, under Sydney Harbour, through new Central Business District stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest comprises two core components – the Chatswood to Sydenham project, and the Sydenham to Bankstown upgrade. This document refers to the Sydenham to Bankstown upgrade (herein referred to as the Southwest Metro (SWM) Project).

The SWM Project was declared to be State Significant Infrastructure (SSI) and Critical State Significant Infrastructure (CSSI) by a Ministerial order on 10 December 2015 under Section 5.12 (4) and 5.13 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) (previously referred to as sections 115U(4) and 115V prior to amendment of the EP&A Act). An Environmental Impact Statement (EIS) (GHD/AECOM September 2017) was prepared and placed on public exhibition from 13 September 2017 to 8 November 2017. A Submissions and Preferred Infrastructure Report (SPIR) (GHD/AECOM June 2018) was prepared in response to the submissions received during the EIS exhibition period. The SPIR was placed on public exhibition from 20 June 2018 to 18 July 2018. A Submissions Report was then prepared by Sydney Metro (September 2018) in response to submissions received during the SPIR exhibition period. The project was approved by the Minister for Planning on 12 December 2018 (Planning Approval number SSI-8256).

A modification report for the SWM Project was prepared by Sydney Metro (May 2020) and placed on public exhibition from 21 May 2020 to 4 June 2020. A Submissions Report was prepared by Sydney Metro (September 2020) in response to the submissions received during the modification report exhibition period. The SWM Project Modification was determined by the Minister for Planning on 22 October 2020.

Downer EDI Works (Downer) has been appointed as the Principal Contractor for the station upgrades at Hurlstone Park, Belmore and Wiley Park for the Southwest Metro Project. The scope of works for these upgrades are outlined below.

From 01 June 2023, Downer will start operating under the name DT Infrastructure, following the acquisition of the Downer Infrastructure branch by Gamuda Australia.

1.1. Scope of works

This document refers to the Southwest Metro – Dulwich Hill, Campsie and Punchbowl Station Upgrades (the Project). Below is a description of the Construction scope for the Project:

Dulwich Hill Station

- Construction of new covered station concourse bridge from Bedford Crescent and Light Rail entry to Ewart Lane with connection to platforms;
- Refurbishment and reuse of overhead booking office;
- Refurbishment and reuse existing platform building;
- Provision of new safety rail to Wardell Road bridge adjacent to booking office;
- Construction of new landscaped public plaza incorporating lighting, seating and access to station entries;
- Construction of new platform building;
- Construction of new shared path linking Wardell Road and Ewart Lane;
- Construction of new stairs to Ewart Lane car park;
- Provision of accessible access to the pedestrian crossing at Wardell Road;
- Provision of new bicycle parking hoops;
- Construction of new service building and associated infrastructure;

- Platform works, including raising platform and provision of platform drainage. Installation of 1500mm deep tile zone, temporary tactiles and yellow safety line;

- Platform works also includes provision for platform edge screens (PES), platform screen doors (PSD) and mechanical gap fillers (MGF) (to be installed by others);
- Provision of new pedestrian lighting between Bedford Crescent and Keith Lane;
- Provision of new shelter and seat for kiss and ride on Bedford Crescent;
- Landscaping to the south of the station;
- Dudley Street bus interchange area works;
- Provision of new vertical protection screens to both sides of existing Wardell Road bridge;
- Provision of 2 new lifts and associated infrastructure, landings and canopies to lift entries;
- Installation of new security and segregation fencing;
- Construction of new Combined Services Route (CSR); and
- Services relocations / enabling works.

Campsie Station

- Refurbishment and reuse of heritage platform buildings;
- Construction of secured bike locker;
- Construction of new canopy over the concourse;
- Platform works, including raising platform and provision of platform drainage. Installation of 1500mm deep tile zone, temporary tactiles and yellow safety line;
- Platform works also includes provision for PES, PSD and MGF (to be installed by others);
- Replace open fencing on Beamish Street and renew existing planters;
- Installation of 16 x bike racks off North Parade in existing car park;
- Construction of new services building and associated infrastructure;
- Replacement of planter beds to corners of Beamish Street;
- Construction of new kiss and ride on South Parade;
- Installation of new security and segregation fencing;
- Construction of new CSR; and
- Services relocations / enabling works.

Punchbowl Station

- Repurpose and refurbishment of station rooms in Platform buildings 1 and 2;
- Provision of three new lifts and associated infrastructure, landings and canopies to lift entries and platform;
- Installation of new canopy over existing stair at Northern entry;
- Installation of new roof above the concourse bridge, Southern entry and platform stairs.

- Removal of hooped top fencing to station concourse overbridge and platform stairs and replaced with compliant glass screens and stair balustrades;
- Installation of new handrails;
- Removal of existing southern stairs, installation of new concrete slab at concourse level and new stairs further south;
- Platform works, including raising platform and provide platform drainage. Installation of 1500mm deep tile zone, temporary tactiles and yellow safety line. Provision of egress ramps off platform as required by fire life safety strategy;
- Platform works also includes provision for PES, PSD and MGF to be installed by others;
- Installation of new bike parking hoops off The Boulevarde and adjacent to the Northern entry;
- Installation of bollards to the edge of the carpark and extension to new paving to lift landing and edge of carpark;
- Landscaping to western end of Southern entry behind the retail properties;
- Mass planting to existing garden beds adjacent to Northern entry and replace timber logs;
- Upgrade to existing pedestrian pathway under Punchbowl Road, including handrail and fencing;
- Upgrade to existing lighting;
- Paint finish to wall and soffit and provision for CCTV;
- Landscaping and new lighting to Northern entry;
- Provision for pop-up retail in the park adjacent the Northern entry.
- Provision of kiss and ride on The Boulevarde;
- Construction of new service building, associated infrastructure and landscaping;
- Installation of new security fencing;
- Construction of retaining walls;
- Construction of new CSR; and
- Services relocations / enabling works.

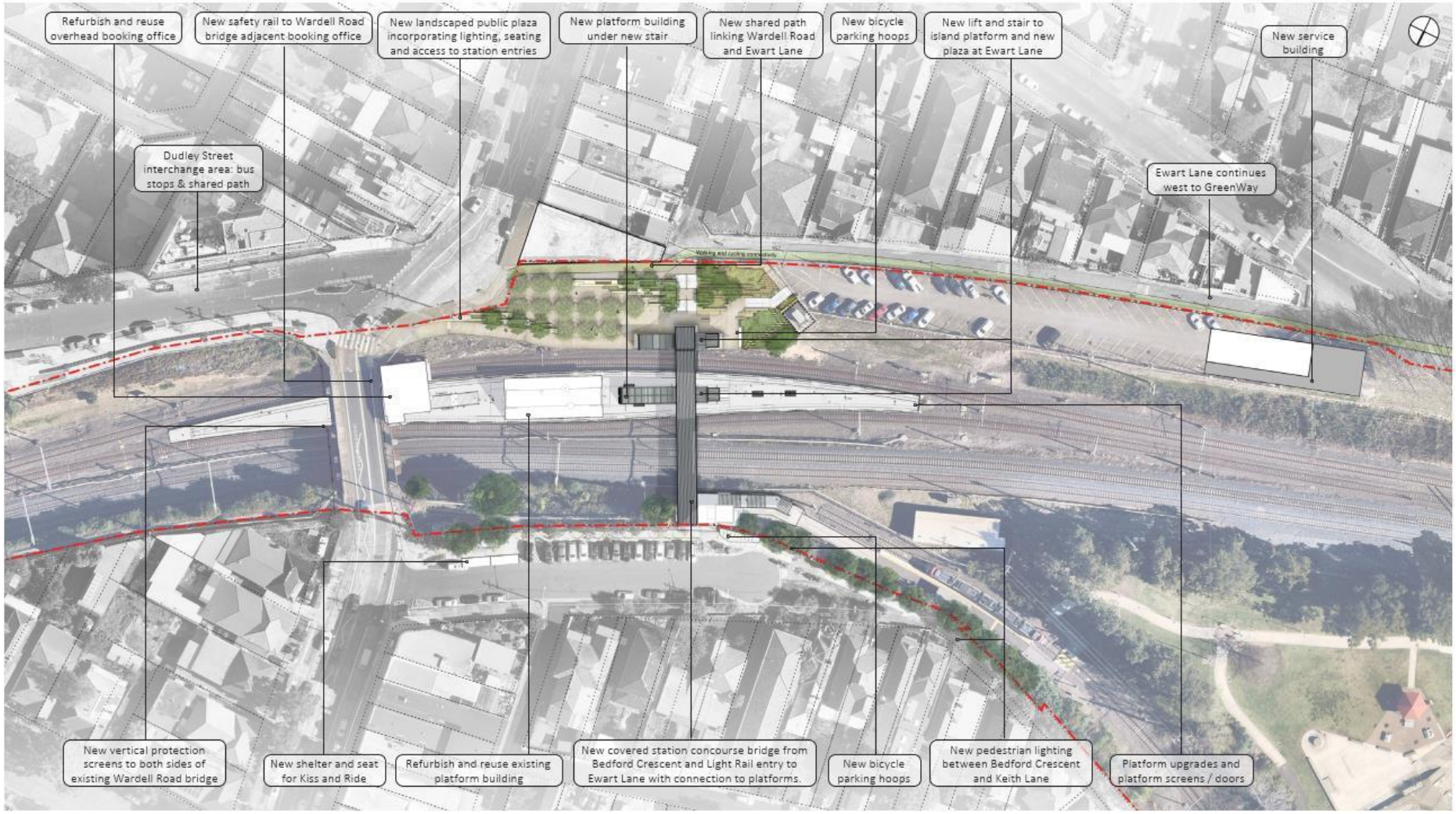

Figure 2 Sydney Metro Dulwich Hill Station upgrades

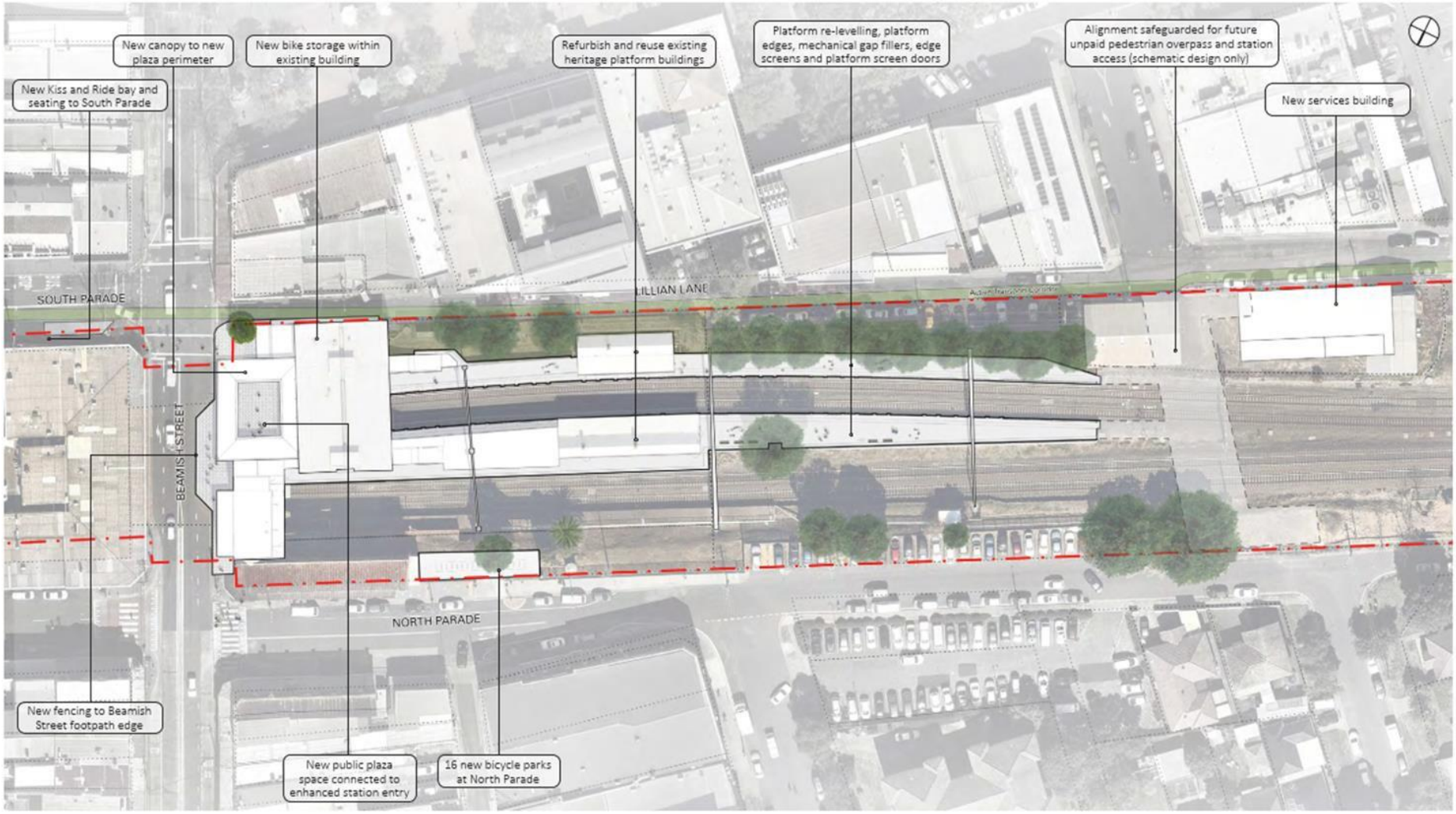

Figure 3 Sydney Metro Campsie Station upgrades

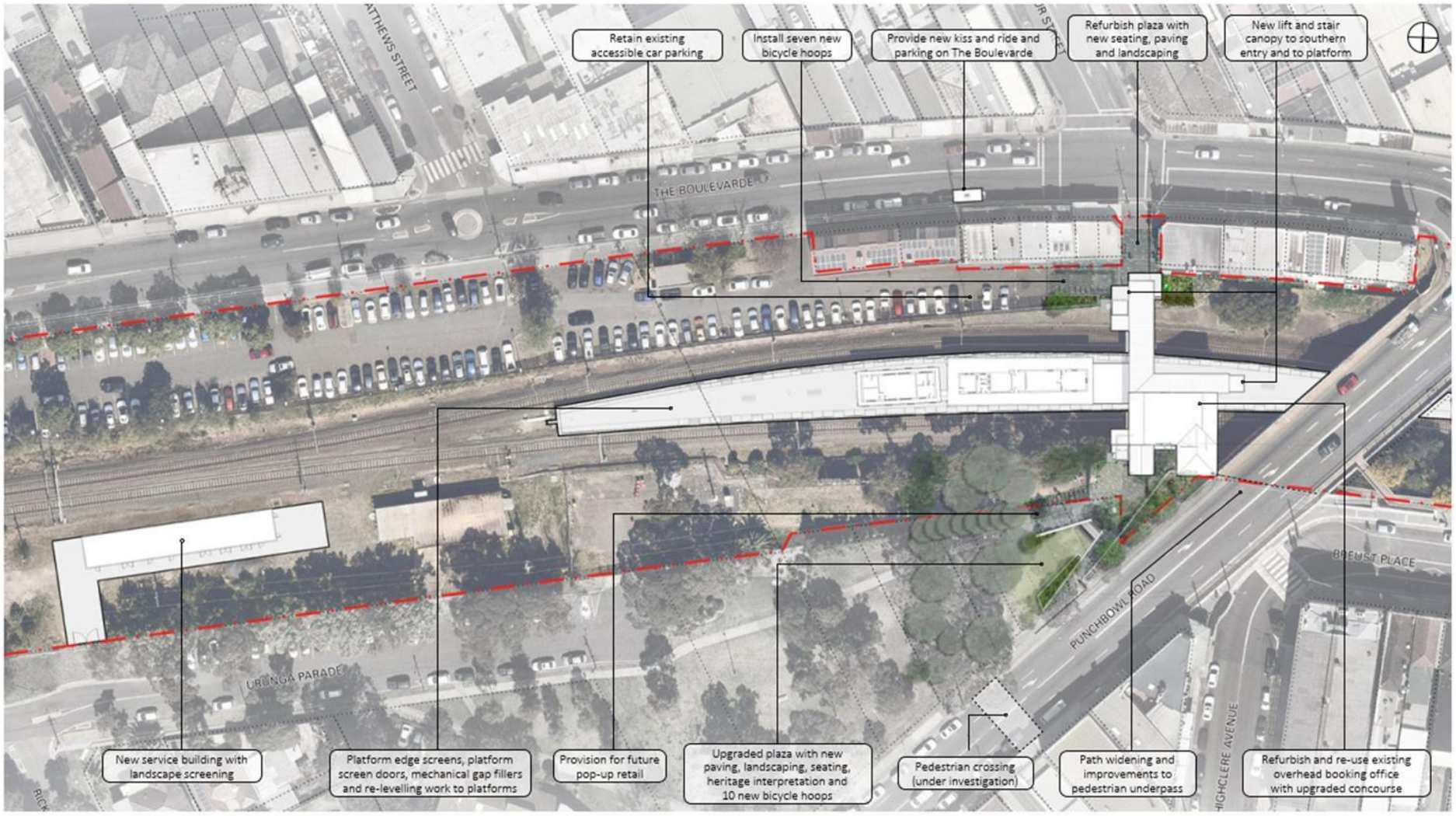

Figure 4 Sydney Metro Punchbowl Station upgrades

Temporary Construction facilities to facilitate Construction of the Project would be located at the locations outlined in Table 3. Refer to Figure 2.1 within Appendix B of the SPIR for indicative layouts of these facilities. Figure 2.4 within Appendix B of the SPIR also provides further detail of work site W7.

Table 3 Temporary Construction facilities

SPIR reference	Location	Existing use
C2	Ewart Lane, Dulwich Hill	Rail corridor, parking
W3	Bedford Crescent, Dulwich Hill	Rail corridor and Council car park
C7	North Parade/Wilfred Avenue, Campsie	Rail corridor, road reserve with parking
C8	Lilian Street, Campsie	Rail corridor, parking
C12	Bridge Road, Campsie	Sydney Trains Maintenance Facility
C18	Urunga Parade Punchbowl	Rail corridor
C19	Urunga Parade, Punchbowl	Rail corridor, road reserve
C20	The Boulevarde, Punchbowl	Parking and corridor
C21	Breust Place, Punchbowl	Rail corridor

In accordance with CoA A16-A19 Downer has implemented additional Ancillary Facilities at Campsie and Dulwich Hill, as referenced in Table 3.1 below:

Table 3.1 Additional Ancillary Facilities

CoA pathway	Location	Existing use
A19 – Minor AF	Ewart Street Carpark, Dulwich Hill	Sydney Train car park (rail corridor)
A19 – Minor AF	Wilfred Avenue, Campsie	Sydney Train car park (rail corridor)

When establishing a construction facility, Downer will consider the requirements of the CEMF, CoA and REMM in developing the layout of the site. Including, but not limited to:

- The location of noise intensive works and 24-hour activities in relation to noisesensitive receivers;
- The location of site access and egress points in relation to noise and light sensitive receivers, especially for sites proposed to be utilised 24 hours per day;
- The use of site buildings to shield noisy activities from receivers;
- The use of noise barriers and / or acoustic sheds where feasible and reasonable for sites proposed to be regularly used outside of daytime hours;
- Aim to minimise the requirement for reversing, especially of heavy vehicles.

1.2. Purpose of this CEMP

This Construction Environmental Management Plan (CEMP) outlines how Downer will meet the environmental outcomes for the design and Construction of the Project. This will be achieved through the development and application of Downer contract-specific Environmental Management System (EMS) and this Plan. Sydney Metro is delivering the Project on behalf of the NSW Government.

In accordance with the Sydney Metro City & Southwest - Sydenham to Bankstown Staging Report, the Principal Contractor will implement the environmental management requirements of the CEMF in line with the DCP column in Table 5 of the Staging Report.

Figure 5 outlines the applicability of the CEMF to the Project (and is extracted from Table 5 of the Staging Report).

CEMF Environmental Management Category	DCP
Waste / Spoil / Recycling *	CEMP-P
Groundwater	CEMP
Traffic	CoA E47 CTMP
Noise & Vibration	CEMP sub-plan
Heritage	CEMP sub-plan
Flora & Fauna / Biodiversity	CEMP-P
Visual Amenity	CEMP sub-plan
Carbon & Energy	SMP
Materials	SMP sub-plan
Soil & Water	CEMP sub-plan
Air Quality	CEMP-P
Workforce Development	WFDIP Plan

CEMP-P: CEMP procedure

CTMP: Construction Traffic Management Plan (standalone document)

SMP: Sustainability Management Plan (standalone document)

WFDIP: Workforce Development and Industry Participation Plan (standalone document)

Figure 5 CEMF Applicability to the Project

The following CEMP sub plan, which was prepared separately to this document, will form part of the CEMP but was not required to be submitted to DPE:

- Visual Amenity Management Plan (as referred to under Section 3.4 of the CEMF).

The following stand-alone plan was also be prepared and submitted to DPE for information and to TfNSW for information following engagement with the Sydney Coordination Office (SCO) (as per CoA E47):

- Construction Traffic Management Plan (as referred to in CoA E47 and Section 3.4 of the CEMF).

The following plans are Sub-plans to the Sustainability Management Plan. Refer to the Sustainability Management Plan for further details.

- Carbon and Energy Management Plan; and
- Materials Management Plan.

Management of the following aspects during Construction have been incorporated into the CEMP as procedures (refer to Appendix E for CEMP procedures):

- Biodiversity;
- Groundwater;
- Air Quality; and
- Waste and Spoil.

The CEMP has been developed in accordance with the:

- Framework of AS/NZS ISO 14001:2015 EMS;
- Sydney Metro's Construction Environmental Management Framework v3.2
- New South Wales Environmental Management Systems Guidelines (Edition 3)

Implementation of the CEMP will:

- Identify the environmental obligations and the hazards and risks associated with the works (indicative risks are included in Appendix C);
- Help prevent unauthorised environmental harm;
- Ensure the Principal Contractor complies with the Minister for Planning's Project Planning Approval SSI-8256;
- Ensure the Principal Contractor obtains and complies with relevant licences and approvals, including an Environment Protection Licence (EPL) if required;
- Comply with all relevant environmental legislation;
- Minimise negative impacts on the community that relate to the environmental impacts of the works; and
- Identify and implement feasible opportunities to reduce the environmental impact of the works that are beyond contractual and compliance requirements.

In accordance with CoA C2 and C6 this CEMP was endorsed by the Environmental Representative (ER) before being submitted to the Planning Secretary of the DPE along with, or prior to, the submission of the Sub-plans no later than one (1) month before commencement of Construction.

In accordance with CoA C7, Construction did not commence until the CEMP and relevant Sub-plans listed in CoA C3 of the Project Planning Approval have been approved by the Planning Secretary of DPE. Minor amendments to the CEMP were approved by the ER for implementation for the duration of Construction in accordance with CoA C7.

For Downer this document defines the environmental management principles, processes, procedures, systems, tools, and templates implemented for use throughout the duration of the project. This document is subordinate to the Project Management Plan (PMP) which has been developed to:

- satisfy the requirements of the contract; and
- support the project team in completing the requirements of the project.

This document is subordinate to the Project Management Plan (PMP) and it has been developed to:

i. Comply with the Conditions of Approval, conditions of any licenses, permits or other approvals issued by government authorities for the Project, all relevant legislation and regulations, and accepted best practice management;

ii. Comply with Minister's (NSW Government, Department of Planning and Environment, Infrastructure Approval) Conditions of Approval (CoA) relating to Section 5.19 of the *Environmental Planning & Assessment Act 1979*, the Sydney Metro Sydenham to Bankstown Upgrade project State Significant Infrastructure 8256, 12 December 2018.

iii. Comply with Exhibit A Scope of Works and Technical Criteria – Southwest Metro Station Upgrade Works Package 6 (main body) 1.0

iv. Comply with Exhibit A Scope of Works and Technical Criteria – Appendix F03 Environment and Appendix F08 Sustainability.

v. Comply with Annexure 1 and Annexure 2 to Exhibit A - Scope of Works and Technical Criteria – Appendix F03 Environment.

vi. Comply with the relevant requirements of the NSW Government's *Guideline for Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004).

vii. Include the DTI Environmental Sustainability Policy 2023

viii. Comply with Downer/DTI Environmental Management System as certified under ISO14001:2015 – certificate no. 47714001610020 (Appendix D)

ix. Address all relevant obligations under TfNSW Sustainable Design Guidelines v.4.0 (SDG)

x. Provides specific management measures to ensure that construction works have minimal environmental impact and risk, and where possible, enhanced environmental outcomes.

xi. Support the project team in completing the requirements of the project.

1.2.1 Document Scope (Alignment to Downer ISO 14001:2015)

The scope of this document applies to Downer Transport Projects, specifically the Southwest Metro Station Upgrade Works Package 5 hereafter referred to as SMSP5.

This document applies to all aspects of environmental management for the project. Whilst this CEMP is in the template and format of the client as issued as part of the contract, Downer has conducted a consistency assessment with the Downer TDS template to ensure there is no departure from Downers EMS and DG-DM-TP028 Environmental Management Plan – Cat 4 and 5.

The target audiences for this document are all Downer workers, Dower sub-contractors and any other relevant stakeholders. The document has been produced in a first instance to comply with Downer's Environmental Management System as certified under ISO14001:2015 and looks to ensure the correct environmental controls, mitigation measures, auditing and assurances are upheld throughout the project. As a minimum, Downer's Environmental Management System implemented on this project looks to ensure:

- appointment of an environment lead or environment team, who is responsible for the EMS and for ensuring organisational commitment

- establishment / implementation of the environmental policy for the organisation
- identification of significant environmental aspects (activities) and impacts
- identification of relevant legislative and regulatory requirements
- identification of environmental priorities and establishment of environmental objectives and targets
- development and implementation of an environment management program (this includes assigning responsibilities for undertaking actions)
- establishment of a monitoring, review and reporting program to review effectiveness of the program, to report to management on implementation and to undertake any corrective action
- ensuring that the EMS is based on the premise of continued improvement.

1.2.2 Referenced Documents

IMS DOCUMENTS		USE FOR PROJECT? *If No, see project specific documents.*	
POLICIES			
SM ES-ST-209	Sydney Metro Environment Sustainability Policy	☒ Yes	☐ No
DTI-HSEQ-PO200	DTI Environmental Sustainability Policy	☒ Yes	☐ No
PRINCIPLES			
DG-ZH-PN002	10 Environmental Principles	☒ Yes	☐ No
STANDARDS			
SM ES-ST-202	Environment Compliance Management Standard	☒ Yes	☐ No
DTI-HR-ST013	Training & Competency Management Standard	☒ Yes	☐ No
DTI-HSEQ-ST002	Legislative and Other Requirements Standard	☒ Yes	☐ No
DG-ZH-ST013	HSEQ Harm Worker Consultation Standard	☒ Yes	☐ No
PROCEDURES			
DG-DM-PR003	Operational Change Management Procedure	☒ Yes	☐ No
DG-QA-PR003	Internal Audits Procedure	☒ Yes	☐ No
DTI-RM-ST001	Risk and Opportunity Management Standard	☒ Yes	☐ No
DG-ZH-PR006	Incident Management Procedure	☒ Yes	☐ No
DG-ZH-PR007	Zero Harm Performance Monitoring and Reporting Procedure	☒ Yes	☐ No
DG-ZH-PR015	Emergency Management Procedure	☒ Yes	☐ No

DG-ZH-PR077.1	Sustainability Data Collection and Reporting Procedure	Yes	☐ No
DG-ZH-PR116.1	Inspections Procedure	Yes	☐ No
SM ES-PW-310	Out of Hours Works Assessment Procedure	Yes	☐ No
SM ES-PW-303	Environmental Incident Classification and Reporting Procedure	Yes	☐ No
SM ES-PW-309	Water Discharge and Reuse Procedure	Yes	☐ No
SM ES-PW-314	Planning Approval Consistency Procedure	Yes	☐ No
SM PS-PW-330	Crisis Management Implementation Plan	Yes	☐ No
SM-18-00105232	Sydney Metro City & Southwest TfNSW Unexpected Finds Procedure v1.4	Yes	☐ No
FORMS			
SM ES-FT-421	Sydney Metro City & Southwest Environmental Reporting Template	Yes	☐ No
SME ES-FT-439	Sydney Metro City & Southwest Sustainability Reporting Template	Yes	☐ No
SM ES-FT-403	Environmental Incident and Non-Compliance Report Form	Yes	☐ No
SM ES-FT-406	Environmental Inspection Information & Summary	Yes	☐ No
REGISTERS			
DA-QA-RG001	Downer Group Definitions Register	Yes	
OTHER			
SS 2017–24	Sydney Metro City & Southwest Sustainability Strategy	☒ Yes	
SM ES-ST-210	City and Southwest Construction Noise and Vibration Strategy	☒ Yes	
CERT	TfNSW Carbon Estimation and Reporting Tool	☒ Yes	
SM ES- ST-214	Principal's General Specifications G10 - Traffic and Transport Management	☒ Yes	

PROJECT SPECIFIC DOCUMENTS

DTI-LG-FM007	Environmental Inspection Checklist
PCMWA 001	Package 5 and Package 6 –Pre-Construction Site Establishment
PCMWA 002	Package 5 and Package 6 –WE38 Possession and Minor, Standard Hours Works
This Document	Construction Environment Management Plan
Within CEMP Annex E	Flora and Fauna Management Plan (Biodiversity)
Within CEMP Annex E	Groundwater Management Plan
Within CEMP Annex E	Air Quality Management Plan
Within CEMP Annex E	Waste and Spoil Management

SWM-DCP-SWMP-001	Soil and Water Management Plan
SWM-DCP-HMP-001	Heritage Management Plan
SWM-DCP-NVMP-001	Noise and Vibration Management Plan
SMCSWSW5-DEW-WEC-SU-PLN-000043	Sustainability Management Plan
SMCSWSW5-DEW-WEC-WR-PLN-000034	Workplace Relations Management Plan
SMCSWSW5-DEW-WEC-WD-PLN-000040	Workforce Development and Industry Participation Plan
SMCSWSW5-DEW-WEC-HS-PLN-000038	Project Health and Safety Management Plan
TBA	Construction Traffic Management Plan
SMCSWSW5-DEW-WEC-SU-PLN-000043	Carbon and Energy Management Sub-Plan (Annex 1 of the Sustainability Management Plan)
SMCSWSW5-DEW-WEC-SU-PLN-000043	Materials Management Sub-Plan (Annex 2 of the Sustainability Management Plan)
SMCSWSW5-DEW-WEC-PM-PLN-000024	Project Management Plan
SMCSWSW5-DEW-WEC-PM-PLN-000025	Technical Management Plan
SMCSWSW5-DEW-WEC-PM-PLN-000026	Risk Management Plan
SMCSW SW5-DEW-WEC-PM-PLN-000027	Testing and Commissioning Plan
SMCSWSW5-DEW-WEC-QM-PLN-000056	Quality Plan
SMCSWSW5-DEW-WEC-CM-PLN-000055	Construction and Site Management Plan
SMCSWSW5-DEW-WEC-CL-PLN-000028	Community Liaison Management Plan
TBA	Advertising Provisioning Plan
SMCSWSW5-DEW-WEC-WR-PLN-000034	Obsolescence Management Plan
SMCSWSW5-DEW-WEC-PR-PLN-000117	Procurement Plan
SWM5-CM-PLN-00016	Cost Management Plan
SWM5-PM-PLN-0017	Systems Integration Plan
SMCSWSW5-DEW-WEC-CM-PLN-000101	Demolition Management Plan
SMCSWSW5-DEW-WEC-HS-PLN-000037	COVID-19 Management Plan

1.3. Environment and sustainability policy statement

Sydney Metro's Environment and Sustainability Policy is included in Appendix D. The policy reflects a commitment in the delivery of the project to:

- Align with, and support, Transport for NSW (TfNSW) Environment & Sustainability Policy;
- Optimise sustainability outcomes, transport service quality, and cost effectiveness;
- Develop effective and appropriate responses to the challenges of climate change, carbon management, resource and waste management, land use integration, customer and community expectation, and heritage and biodiversity conservation;
- Be environmentally responsible, by avoiding pollution, enhancing the natural environment and reducing the project ecological footprint, while complying with all applicable environmental laws, regulations and statutory obligations; and
- Be socially responsible by delivering a workforce legacy which benefits individuals, communities, the project and industry, and is achieved through collaboration and partnerships.

The Principal Contractor engaged for the Sydney Metro Package 5 (Dulwich Hill, Campsie and Punchbowl) Project is DT Infrastructure[1] and, this CEMP has been revised to contain and reflect DT Infrastructure's contract specific environmental policy, in accordance with Section 3.3(d)(i) of the CEMF.

DT Infrastructure's Environmental Sustainability Policy (DTI-HSEQ-PO200) (which is contained within Appendix D) reflects the following commitments in the delivery of project:

- minimise the short and long-term impact of our activities on the environment and local communities through responsible environmentally sustainable management within design, planning, delivery, construction, manufacturing and operation
- promote a positive culture through implementing initiatives that foster sustainable innovation
- our products and services will be optimised to improve our environmental sustainability performance comply with relevant environmental legislation, appropriate industry guidelines and standards, Sydney Metro's and regulatory agency requirements
- implement responsible resilient work practices that minimise the impact on local communities
- implement and maintain an Environmental Management System in accordance with the international standard AS/NZS
- establish, monitor, and review our environmental sustainability targets and objectives and identify opportunities to improve it
- regular audits and reviews will help us to evaluate the performance, compliance, and effectiveness of our environmental management system implement effective controls to identify, evaluate, eliminate or reduce adverse environmental risks from our work activities
- take all practical measures to protect biodiversity and ecosystems and prevent pollution

[1] Previously Downer EDI

- drive innovation to identify sustainable supply chain; reduce and management energy, waste and water consumption; decrease and manage air emission and effluents, and climate change adaptation and mitigation
- procure goods and services that minimise environmental risks and maximise sustainable benefits and opportunities for the entire life cycle
- consult with stakeholders and report on our environmental sustainability performance regularly
- educate, train, and encourage our employees and business partners in order to help them understand their responsibilities when it comes to implementing environmental sustainability principles and practices. We will also display this policy and make it public, as well as share it with interested parties.

1.3.1. Sydney Metro Environment and Sustainability Statement of Commitment

The Sydney Metro Environment and Sustainability Statement of Commitment is included in Appendix D and has six guiding principles which reflect the key sustainability principles for the project, namely to:

- demonstrate leadership – deliver a world class metro that is environmentally and socially conscious, share's knowledge and demonstrate innovation in sustainability
- tackle climate change – integrate a comprehensive climate change response, and drive excellence in low carbon solutions
- manage resources efficiently – achieve whole-of-life value through efficient use and management of resources
- drive supply chain best practice – collaborate with key stakeholders to drive a lasting legacy in workforce development, industry participation and sustainable procurement
- value community and customers – respond to community and customer needs, promote heritage, liveable places and wellbeing for current and future generations
- respect the environment – minimise impacts and take opportunities to provide environmental improvements.

1.4. Objectives and targets

The key objective of this Plan is to set in place a management approach for the Project which addresses all relevant environmental and planning requirements. Key environmental performance outcomes, commitments and mitigation measures for the Project have been sourced from the project's EIS and the CEMF and are summarised in Table 4.

Additional environmental targets for the works are:

- Compliance with the Minister for Planning's Project Planning Approval SSI-8256;
- Compliance with all permits and licences; and

- Continual improvement through collaboration with Sydney Metro, regulatory agencies and other key stakeholders.

In consideration of DTI-HESQ-PO200 Environmental Sustainability Policy, Sydney Metro's contractual requirements, and any identified hazards and/ or risks for the project, DTI has developed a set of objectives and targets that are applicable to this project, as per the following table. These objectives and targets are managed to ensure that all identified, as well as potential environmental impacts that could reasonably be expected to occur during the works, fall within acceptable and agreed limits. This is achieved through pro-active environmental management planning prior to carrying out particular elements of work. In addition to this DTI has set its own Objectives and Targets to ensure compliance with the DTI Environmental Management System.

SMSP5 Project specific requirements are listed below in Table 4.

Table 4 Project Specific Objectives and targets

Objective	Target	Management measure
Biodiversity The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project Construction and operation.	The project is designed to minimise impacts on biodiversity. Where practicable, the design minimises the need to clear vegetation. Potential impacts on biodiversity are managed in accordance with relevant legislation, including the EP&A Act, *Biodiversity Conservation Act 2016* (BC Act) and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The biodiversity outcome is consistent with the Framework for Biodiversity Assessment (OEH, 2014a).	Compliance Monitoring and Reporting Program
Flooding and hydrology The project minimises adverse impacts on existing flooding characteristics. Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure. Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised. The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where values are achieved) or improved and maintained (where values are not achieved). Sustainable use of water resources.	Construction is undertaken in a manner that minimises the potential for adverse flooding impacts, through staging of works and the implementation of mitigation measures. Construction compounds and work sites are laid out such that flows are not significantly impeded. The project maintains or reduces flood levels within and adjacent to the rail corridor. The project avoids long term impacts to surface water. Opportunities to reuse water resources are considered during the design process. The use of water during Construction is minimised.	Management of soil and surface water will be undertaken throughout the delivery of the Project in accordance with the SWMP.
Heritage The design, Construction and operation of the project facilitates, to the greatest extent possible, the long-term protection, conservation and management of the heritage significance of items of environmental heritage and Aboriginal objects and places. The design, Construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of environmental heritage and Aboriginal objects and places.	The design is sympathetic to the historic significance of existing stations and the heritage significance of surrounding listed heritage items, and where practicable, avoids and minimises impacts to heritage. The design and mitigation strategies are reviewed by the Sydney Metro Design Review Panel. Impacts on heritage are managed in accordance with relevant legislation, including the EP&A Act, the Heritage Act 1977, and relevant guidelines. The potential impacts identified are mitigated by the mitigation measures provided.	Management of heritage will be undertaken throughout delivery of the project in accordance with the HMP.
Noise and vibration – amenity Construction noise and vibration (including airborne noise, groundborne noise and	The project will minimise impacts to the local community by:	Management of noise and vibration impacts will be undertaken

Objective	Target	Management measure
blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the project are effectively managed to protect the amenity and well-being of the community.	controlling noise and vibration at the source controlling noise and vibration on the source to receiver transmission path controlling noise and vibration at the receiver implementing practicable and reasonable measures to minimise the noise and vibration impacts of Construction activities on local sensitive receivers.	throughout delivery of the project in accordance with the NVMP.
Noise and vibration – structural Construction noise and vibration (including airborne noise, groundborne noise and blasting) are effectively managed to minimise adverse impacts on the structural integrity of buildings, items including Aboriginal places and environmental heritage, and nearby road infrastructure. Increases in noise emissions and vibration affecting environmental heritage as defined in the **Heritage Act 1977** during operation of the project are effectively managed.	The project minimises impacts to structures by: controlling vibration at the source controlling vibration on the source to receiver transmission path implementing practicable and reasonable measures to minimise vibration impacts of Construction activities on structures.	Management of noise and vibration impacts will be undertaken throughout delivery of the project in accordance with the NVMP.
Socioeconomic, land use and property The project minimises adverse social and economic impacts and capitalises on opportunities potentially available to affected communities. The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	The project minimises impacts to the local community, community infrastructure, and businesses. Impacts to existing land use and properties are minimised. The project is appropriately integrated with adjoining land uses, and access to private properties is maintained.	Management will be undertaken in accordance with the REMMs and CoA's.
Soils The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	Site-specific soil characteristics are taken into consideration during detailed design and Construction. Any contamination is managed in accordance with relevant regulatory requirements. Any soil waste is assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).	Management of soil and surface water will be undertaken throughout the delivery of the Project in accordance with the SWMP.
Sustainability The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources. Conservation of natural resources is maximised.	Sustainability considerations are integrated throughout design, Construction, and operation. The project would be carried out in accordance with the Sydney Metro City & Southwest Sustainability Policy.	Refer to Sydney Metro Sustainability Management Plan and Principal Contractor's Sustainability Management Plan.
Traffic, transport and access	Impacts to traffic and transport are minimised.	Management will be undertaken in

Objective	Target	Management measure
Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. **The safety of transport system customers is maintained.** Impacts on network capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.	Motorist, pedestrian and cyclist safety will be maintained or improved. Safe access to properties is maintained.	accordance with the CTMP, REMMs and CoA's.
Place making and urban design The project capitalises on opportunities to improve place, character and quality of the surrounding build and natural environment (including adjoining public spaces). The project contributes to the accessibility and connectivity of communities.	The project is designed to have regard to the surrounding landscape and visual environment and to minimise the potential for visual impacts. The project is visually integrated with its surroundings. The stations provide a sense of place and contribute positively to the surrounding urban environment. The design considers futureplanning for the Sydenham to Bankstown Corridor Urban RenewalStrategy. Vegetation providing screening to the rail corridor is retained where practicable.	Management will be undertaken in accordance with the REMMs and CoA's.
Water – quality The project is designed, constructed and operated to protect the NSW Water Quality Objectives where they are currently being achieved, and contribute towards achievement of the Water Quality Objectives over time where they are currently not being achieved, including downstream of the project to the extent of the project impact including estuarine and marine waters (if applicable).	Impacts to water quality during Construction and operation are minimised. Erosion and sediment controls during Construction are implemented in accordance with Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) and Managing Urban Stormwater: Soils and Construction Volume 2 (Department of Environment and Climate Change, 2008a). The project would protect or contribute to achieving the Water Quality Objectives, during Construction and operation. Construction water quality discharge would comply with the requirements of the Water Quality Monitoring Program.	Management of soil and surface water will be undertaken throughout the delivery of the Project in accordance with the SWMP.
Utilities The project is designed, constructed and operated to minimise impacts to utilities and provision of such to the public.	Impacts to utilities during Construction are minimised. The design considers the inputof utility providers and owners.	Management will be undertaken in accordance with the REMMs and CoA's as well as the Utilities Management Strategy.

The DTI Standard Objectives and Targets are listed below in Table 5.

Table 5: Downer's Objectives and Targets

Focus Area	Objective	Target
Legal Compliance	• Compliance with all legal requirements. • Undertake the project in accordance with environmental approvals.	No regulatory infringements, including PINS and prosecutions. 100% compliance with statutory approvals.
Monitoring	Complete internal environmental audits in accordance with the pre-planned audit schedule.	Complete 100% of scheduled environmental audits.
Reporting	Promote a positive reporting culture. Ensure all environmental observations, hazards and near misses and incidents are entered into **INX**. Ensure actions are closed out by the nominated due dates.	0 actions arising from incident overdue >30 days.
Planning	Ensure that Downer workers are provided with regular and up-to-date information on environmental aspects for the duration of the project.	Review the content of the Environmental Management Plan prior to 25% of the scheduled project duration to maintain the currency of information provided to Downer workers and others.
Risk Management	Ensure that Downer workers are familiar with hazards and risks associated with the execution of the scope of work (work under contract).	The Project Risk & Opportunity Register, controls, and treatment plans are regularly reviewed and communicated to the project team in accordance with DG-RM-PR003 Project Risk and Opportunity Management.
Consultation	Ensure that Downer workers are regularly consulted on matters that affect the environment.	Conduct pre-start meetings (daily), and toolbox meetings (monthly).
Training	Ensure Downer workers are provided with training to enable work practices to be undertaken that are safe and minimise risk to the environment.	All Downer workers undertake, as a minimum, the two levels of induction training, i.e. project specific induction and Downer site specific induction.

2. Legal and approval requirements

2.1. Environmental planning approval process background

As discussed in Section 1, in September 2017 an EIS for the SWM Project was placed on public exhibition for a period of 56 days (eight weeks). A SPIR for the SWM Project was prepared and placed on public exhibition in June 2018 for a period of 28 days (four weeks). A Submissions Report for the SWM project was prepared and publicly released in September 2018. The SWM Project was approved on 12 December 2018 (SSI 8256). A Project Modification was prepared in May 2020 and the Project Modification MOD-1 was approved on 22 October 2020.

Under Section 5.23 of the EP&A Act the following authorisations are not required for approved State Significant Infrastructure (SSI) (and accordingly the provisions of any Act that prohibit an activity without such an authority do not apply):

- A permit under section 201, 205 or 219 of the *Fisheries Management Act 1994;*
- An approval under Part 4, or an excavation permit under section 139, of the *Heritage Act 1977;*
- An Aboriginal heritage impact permit under section 90 of the *National Parks and Wildlife Act 1974;*
- A bush fire safety authority under section 100B of the *Rural Fires Act 1997;* and
- A water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the *Water Management Act 2000.*

In addition, Division 8 of Part 6 of the *Heritage Act 1977* does not apply to prevent or interfere with the carrying out of approved SSI and the following directions, orders or notices cannot be made or given so as to prevent or interfere with the carrying out of approved critical SSI:

- An interim protection order (within the meaning of the *National Parks and Wildlife Act 1974);*
- An order under Division 1 (Stop work orders) of Part 6A of the *National Parks and Wildlife Act 1974*, or Division 7 (Stop work orders) of Part 7A of the *Fisheries Management Act 1994;*
- A remediation direction under Division 3 (Remediation directions) of Part 6A of the *National Parks and Wildlife Act 1974*;
- an order or direction under Part 11 (Regulatory compliance mechanisms) of the *Biodiversity Conservation Act 2016;*
- An environment protection notice under Chapter 4 of the *Protection of the Environment Operations Act 1997*; and
- An order under section 124 of the *Local Government Act 1993.*

The abovementioned potential aspects and impacts are deemed to be addressed under the Project Planning Approval.

2.2. Approval and licencing requirements

DTI is aware of the importance of complying with all applicable environmental measures,and where practicable, exceeds the minimum legislative and regulatory requirements.

DTI's obligations include conditions of regulatory approvals as well as the generally applicable Environmental Acts and their subsidiary legislation. DTI and the project team monitor changes to environmental legislation through monthly updates on environmental law changes provided by EnviroLaw, and ensure compliance is maintained throughout the project's lifecycle.

The key legislative and approval requirements for the works are outlined in Table 6. Further detail is provided in Appendix B.

Table 6 Approval / licence requirements

Regulatory authority	Approval / licence required for this Project
Department of Planning and Environment(DPE)	Project Planning Approval granted under Division 5.2 of the *EP&A Act* (no. SSI-8256) Approval of reports, studies and plans as required by the Project Planning Approval.
Commonwealth Department of Environment	The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) prescribes the Commonwealth's role in environmental assessment, biodiversity conservation and the management of protected areas. Under the EPBC Act, matters of national environmental significance include world and national heritage properties and listed biodiversity impacts. The EIS concludes that the Project would not have a significant impact in relation to these matters. As such the Project is not a Controlled Action and does not require assessment and approval under the EPBC Act.
TfNSW and other road authorities	In accordance with the *Roads Act 1993*, the Principal Contractor will obtain the consent of the appropriate roads authority to erect a structure, carry out work in, on or over a public road, or dig up or disturb the surface of a public road. If the applicant is a public authority, the roads authority must consult with the applicant before deciding whether or not to grant consent or concurrence. As required, road occupancy permits will be sought in accordance with the Construction Traffic Management Plans.
Sydney Water	In accordance with the *Sydney Water Act 1994*, the Principal Contractor will obtain prior approval to connect to the sewer or discharging to sewer if required under a Trade Waste Agreement.

2.3. Relevant legislation

Legislation and other requirements relevant to the Project are outlined in Appendix B.

2.4. Additional environmental assessment

Changes to the project may require an assessment to determine consistency with the Project Approval and Environmental Documents. This assessment would be carried out in accordance with the Sydney Metro Planning Approval Consistency Assessment Procedure (SM ES-PW314).

The assessment will include:

- A description of the existing surrounding environment;
- Details of the ancillary works and Construction activities required to be carried out including the hours of works;

- An assessment of the environmental impacts of the works, including, but not necessarily limited to traffic, noise and vibration, air quality, soil and water, ecology and heritage;
- Details of mitigation measures and monitoring specific to the works that would be implemented to minimise environmental impacts; and
- Identification of the timing for completion of the Construction works, and how the sites would be reinstated (including any necessary rehabilitation).

Consistency Assessments would require approval from the Sydney Metro Director of Environment, Sustainability and Planning. Consistency Assessments would be made available on the Principal Contractor's website and provided to the ER for information.

2.5. Standards and codes

The project will be constructed in accordance with relevant standards and codes in accordance with CoA A8 (i.e. in the form they are in at date of the approval).

Access to the latest Australian standards is available through iGATE.
The environmental publications, standards, codes of practice and guidelines included in Table 7 are relevant to the Project and are referenced throughout this Plan. Other aspect specific guidelines are discussed in the relevant CEMP Sub-plans and other project management plans.

Table 7 Applicable standards and codes

Standard / Guideline	Relevant authority
ISO 14001 Environmental Management Systems – Requirements with Guidelines for use	International Organisation for Standardization
AS/ NZS 1940: 2017 – The Storage and Handling of Flammable and Combustible Liquids	Standards Australia
AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting	Standards Australia
AS 4326 The Storage and Handling of Oxidising Agents	Standards Australia
AS 3780 The Storage and Handling of Corrosive Substances (similar standards exist for other classes of dangerous goods).	Standards Australia
AS 2436 Guide to Noise and Vibration Control on Construction,Demolition and Maintenance Sites	Standards Australia
AS/NZS 3833 The Storage and Handling of Mixed Classes of Dangerous Goods, in Packages and Intermediate Bulk Containers	Standards Australia
BS 7385-2 Evaluation and Measurement for Vibration in Buildings. Guideto Damage Levels from Groundborne Vibration	British Standards
IECA 2008 Best Practice Erosion and Sediment Control	IECA
ANZECC 1992 Australian Water Quality Guidelines for Fresh and Marine Waters	ANZECC
Australian Dangerous Goods Code	National Transport Commission
Environment Protection Manual for Authorised Officers: Bunding and Spill Management technical bulletin (EPA, 1997)	NSW EPA

Interim Construction Noise Guidelines (Department of Environment and Climate Change, 2009)	NSW EPA
ISO 14001 Environmental Management Systems – Requirements with Guidelines for use	International Organisation for Standardization
Managing Urban Stormwater: Soil and Construction (Landcom, 2008)	Landcom
Waste Classification Guidelines (Department of Environment, Climate Change and Water, 2008)	NSW EPA

2.6. Environment Protection Licence

At this stage, Sydney Metro's Principal Contractor has not sought an Environment Protection Licence (EPL) from NSW EPA.

If DTI applies for an EPL for the Project, then this CEMP will be updated to incorporate the EPL's requirements.

3. Environmental management plan

3.1. Preparation and availability of the CEMP

3.1.1. Preparation

Consistent with the requirements of CoA C1, this CEMP has been prepared in accordance with the approval documents and the Sydney Metro Construction Environmental Management Framework (CEMF).

The CEMP incorporates all relevant requirements of the EIS documentation, CoA, SPIR, Submissions Report, Modification Report as well as all relevant licences, permits and approvals for the Project including Sydney Metro's Environment and Sustainability Policy. The Sydney Metro and Downer Environment and Sustainability Policy have been attached to this CEMP (Appendix D).

For further detail regarding CEMP preparation refer to Section 1.2 of this CEMP. The CEMP was submitted to the Planning Secretary prior to commencement of Construction as outlinedin CoA C2.

3.1.2. Availability

This CEMP will be available to all personnel and subcontractors via Downer's Project document control management system. It is the responsibility of DTI to ensure allpersonnel and subcontractors have access to the Project's CEMP. An electronic version of the CEMP will be made available on the project website, in accordance with CoA B14. The project website can be at: https://www.downergroup.com/sydney-metro-environmental-documents. Superseded versions of the plan can be found at: downergroup.com/sydney-metro-archive.

Subject to confidentiality, all documents subject to CoA B14, including this CEMP will be made publicly available. In accordance with CoA B14, copies of the following documents will be published prior to works commencing and maintained on the Project website:

a) Information on the current implementation status of the CSSI

b) The telephone number, postal address and email address required under Condition B6

c) A copy of the documents listed in Conditions A1 and A2 of the approval and any documentation relating to any modifications made to the CSSI or the terms of this approval

d) A copy of the approval in its original form, a current consolidated copy of the approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister to a modification of the terms of this approval

e) A copy of an EPL required and obtained in relation to the CSSI (as / if required)

f) A current copy of each document required under the terms of the approval, which must be published before the commencement of any relevant activity to which they relate or before their implementation, as the case may be

g) A copy of the compliance reports required under Conditions A29 and A32 of the approval.

Where a CoA requires a document to be prepared prior to commencement of any work or Construction, a current copy of the relevant document will also be published on the Project website before the activity is undertaken.

Confidential information, which may include the location of threatened species, Aboriginal objects or places and personnel contact details, will be removed from all documents provided or made available to the public. The Project's Environment Policy will be displayed on the Project website, at the site office/s, and communicated to staff and other interested parties via inductions and ongoing awareness programs.

This document is uncontrolled when printed. One controlled hard copy of the CEMP and supporting documentation will be maintained by Downer's Quality Manager at the Project office. Copies of this CEMP will be distributed via the Project document management system to:

- Downer's Project Director;
- Downer's Construction Director;
- Downer's Environmental Manager;
- Downer's Public Liaison Manager;
- Sydney Metro; and
- The ER.

3.2. Planning

3.2.1. Compliance tracking

In accordance with CoA A29, a Compliance Monitoring and Reporting Program must be prepared in order to monitor compliance with the terms of the project approval. Compliance reporting on the project will be undertaken in accordance with the requirements of the *City and Southwest – Sydenham to Bankstown Compliance Monitoring and Reporting Program Report* (Sydney Metro, 2019).

It is the responsibility of Sydney Metro to undertake the Compliance Tracking Program in accordance with the *City and Southwest – Sydenham to Bankstown Compliance Monitoring and Reporting Program Report* with input from Downer as required. A compliance matrix has been established for the project, incorporating CoA, REMM, licence conditions, permits and other approvals relevant to the Project to track issues and ensure compliance issues are addressed and closed out. Refer to Section 3.9.4 for further detail regarding the implementation of compliance tracking and reporting during Construction, in accordance with the *City and Southwest – Sydenham to Bankstown Compliance Monitoring and Reporting Program Report.*

3.2.2. Environmental objectives and targets

Refer to Section 1.4.

3.2.3. Environmental Work Method Statement and Environmental Control Maps

Environmental Works Method Statements (EWMS) have been / will be prepared for relevant Constructionactivities. Relevant Construction activities include those that pose a high risk to the environment, as determined by Downer. Downer will incorporate relevant mitigation measures

and controls, including those from relevant management Sub-plans and key procedures to be used concurrently with the EWMS. EWMS will be specifically prepared to communicate requirements, actions, processes and controls to Construction personnel using plans, diagrams and simple written instructions.

EWMS will be prepared progressively prior to and throughout Construction, in consultation with the relevant site management personnel. This will ensure that all issues are addressed, methods and activities are practical, and all personnel are aware of their commitments and responsibilities.

The EWMS will include at least the following elements:

- Description of the work activity, including any plant and equipment to be used;
- Outline of the sequence of tasks for the activity, including interfaces with other Construction activities;
- Identification of any environmental and/or socially sensitive areas, sites or places;
- Identification of potential environmental risks/impacts due to the work activity;
- Mitigation measures to reduce the identified environmental risk, including assigned responsibilities to site management personnel; and
- Process for assessing the performance of the implemented mitigation measures.

All Construction personnel and subcontractors undertaking a task governed by an EWMS must participate in training on the EWMS and acknowledge that they have read and understood their obligations by signing an attendance record prior to commencing work.

Regular monitoring, inspections and auditing of compliance with the EWMS will be undertaken by project management and environmental personnel to ensure its effectiveness and that all controls are being followed and that any non-conformances are recorded, and corrective actions implemented. Any improvements or changes identified in such reviews will be incorporated into subsequent revisions of the EWMS.

Environmental control maps (ECMs) are to be used in project inductions, work site set-up, as information in tender documents to subcontractors (where applicable) and in support of ancillary environmental approvals. ECMs will be prepared prior to Construction commencing.

The ECMs would be ‘live’ documents and updated to reflect the relevant works stage as works progress. The ECMs will be endorsed by Downer’s Environment Manager (or delegate). The ECMs will be endorsed before being utilised.

The project ECMs shall include but not be limited to:

- Environmental procedures, environmental approvals, or licences that are applicable;
- The worksite layout and boundary, significant structures, entry/exit points and internal roads;
- Consideration of minimising light spillage to surrounding properties, in accordance with CoA E54;
- Location of environmentally sensitive areas and sensitive receivers;
- Environmental control measures;
- Endangered and Threatened Ecological Communities;

- Known cultural heritage sites;
- Known fauna habitat to be protected;
- Watercourses, wetlands and natural springs;
- Acid sulphate soils;
- Project boundaries and work locations;
- Environmental protection boundaries; and
- Designated “No-Go Zones”.

The ECMs would be in addition to any erosion and sediment control plans.

3.3. Resources, responsibilities and authority

Sydney Metro (the Proponent) has engaged Downer as the Principal Contractor to undertake the Dulwich Hill, Campsie and Punchbowl Station Upgrades Project. In accordance with the contract for the Project, Downer must perform certain roles and meet certain requirements under the Planning Approval. This includes consultation with key regulatory stakeholders, such as the NSW EPA, Natural Resources Access Regulator (NRAR) (formerly Department of Industry), Environment, Energy and Science (EES) (formerly OEH), Heritage NSW(formerly OEH) and relevant Councils, where required. DPE is the approval authority for a number of items required under the Planning Approval, including the CEMP and CEMP Sub-plans.

Sydney Metro have engaged, and received DPE approval, for an Independent ER for the Project. The Independent ER will perform the duties described within Table 8 Roles and responsibilities as per the requirements of CoA A26. Sydney Metro have also engaged an Independent Certifier to assess and certify project compliance. The role includes certification against environmental compliance.

Key responsibilities are indicated in Table 8. Note that this is not an exhaustive list of all site personnel and responsibilities. References to other roles and activities may be referred to throughout the CEMP and Sub-plans. Reporting lines are shown in the Organisation Chart in Figure 6.

Table 8 Roles and responsibilities

Position	Key Responsibilities and Authorities
Project Director (Project Leader)	• Reports to senior management within Downer • Ensure that internal audits of the system are conducted • Review audit corrective actions and act as necessary to ensure timelyclose out of issues • Authorise expenditure on environmental issues within limits of authority • Resolve major issues which cannot be resolved by the Project Manager • Must complete corporate and project induction covering environmental responsibilities and Downer’s environmental managementsystem. • Ensure that project responsibilities and authorities are defined and communicated • Provide adequate resources to meet environmental objectives • Approve and implement the CEMP • Ensure that the CEMP is effectively implemented and maintained • Appoint/nominate and provide support for the Environmental Manager

	• Report to senior management on the performance of the system and environmental breaches • Take action to resolve environmental non-conformances, non-compliances and incidents • Ensure suppliers and subcontractors comply with requirements • Report environmental incidents to the client / local authorities as required • Liaise directly with the Independent Environment Representative as required and where appropriate to facilitate any environmental management requirements, including those identified within the Planning Approvals.
Project Manager (Construction Manager)	• Reports to the Project Director • Support the Project Director in environmental matters as required • Oversight of environmental requirements for design and Construction • Must complete corporate and project induction covering environmental responsibilities and Downer's environmental management system. • Supervise all site Construction activities and personnel by ensuring that they meet environmental and other requirements • Organise and manage site plant, labour and temporary materials • Ensure that site environmental controls are properly maintained and provide support for the Environmental Manager • Report all environmental incidents • Take action to resolve non-conformances, non-compliances and incidents • Must complete corporate and project induction covering environmental responsibilities and Downer's environmental management system. • Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.
Procurement Personnel	• Reports to the Project Director • Carefully select suppliers and subcontractors based upon their ability to meet stated requirements • Ensure that purchase orders and agreements include environmental requirements as necessary • Where practical, select materials which are "environmentally friendly" • Must complete corporate and project induction covering environmental responsibilities and Downer's environmental management system. • Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.
Project Environmental Manager	• Reports to the Project Director • Ensure that the CEMP is effectively established, implemented and maintained at the project level • Ensure relevant licences, approvals and permits are obtained • Ensure compliance with all relevant statutes, regulations, rules, procedures, standards and policies • Carry out six monthly reviews of the CEMP and Sub-plans • Liaise with the ER and/or Superintendent on environmental issues, including the written notification of non-conformances (incidents, emergencies or deviations from the CEMP) and non-compliances • Ensure that all personnel on site receive appropriate environmental induction and training and are aware of their environmental responsibilities under the CEMP, relevant legislation and the contract • Report to the Project Director on the performance of the system and improvement opportunities • Provide support to the project team to enable them to meet their environmental commitments

	• Ensure that environmental records and files are collected and maintained • Regular compliance checking as required by this CEMP • Ensure that non-conformances, non-compliances and environmental incidents are recorded, and written reports provided to the Client's Representative within 48-hours. Liaise with the required stakeholders to confirm the nature of the corrective action required and comply with the timeframe within which corrective actions must occur. • Ensure that environmental controls, materials and equipment are maintained • Conduct six monthly review of the CEMP • Develop and deliver environmental training materials in consultation with the Project Training Coordinator • Liaise directly with the Independent Environment Representative as required and where appropriate to facilitate any environmental management requirements, including those identified within the Planning Approvals. The Project Environmental Manager will be the primary contractor contact for the Independent Environmental Representative • Must have tertiary qualifications in environmental engineering / science along with relevant experience working in environmental management roles in Australia. Infrastructure Sustainability Accredited Professional preferred • Must complete corporate and project induction covering environmental responsibilities and Downer's environmental management system • Minimum skill levels: • Minimum 10 years' experience post qualification, with extensive experience in the preparation and implementation of environmental management systems and plans • Tertiary qualification in environmental science or engineering discipline or equivalent • Recent relevant experience in environmental management on major infrastructure projects.
Project Environmental Advisor	• Support the Environmental Manager in matters relating to environmental management • Must have tertiary qualifications in environmental engineering / science along with relevant experience working in environmental management roles in Australia. • Must complete corporate and project induction covering environmental responsibilities and Downer's environmental management system • Liaise directly with the Independent Environment Representative as required and where appropriate to facilitate any environmental management requirements, including those identified within the Planning Approvals.
Communication and Stakeholder Relations Manager	• Leadership and management of the Communications, Stakeholder and Community Relations Team • Build and maintain effective working relationship with Sydney Metro's representative and Stakeholder and Community Liaison team • Develops and oversees the implementation of the CCS and subplans • Responsible for a stakeholder and community relations induction and training program for all personnel involved in the performance of the project • Approves the Communications, Stakeholder and Community Relations team roles, role descriptions and responsibilities • Liaising with the Community Complaints Mediator, where required • Ensures the Community Communications Strategy and key activities are integrated into the project schedule • Attends the Sydney Metro led Communications Management Control Group and reports on activities, strategies and issues

	• Attends the monthly Project Management Review Group meeting to discuss project status and issues • Issues and crisis management • Manages media issues and acts as media spokesperson for the Principal Contractor (subject to media protocols) • Responsible for the Communications and Stakeholder Management KPI as well as the Communications and Stakeholder management component of the Quality of Information and Relationship with the Principal's representative KPI • Required to be on call 24 hours based on the team rotation • Liaise directly with the Independent Environment Representative as required and where appropriate to facilitate any environmental management requirements, including those identified within the Planning Approvals.
Community Place Manager	• Build and maintain effective working relationship with community, businesses, and stakeholders • Support the successful delivery of the project's Community Communication's Strategy and requirements • Implementation of the Community Communications Strategy and any relevant Sub-plans • Liaising with the Community Complaints Mediator, where required • Establish effective working relationships with local stakeholder to support the effective delivery of the project • Required to be on call 24 hours based on the team rotation to respond to enquiries and complaints. • Review, approve and oversee the development and distribution of all notification, newsletter, social media, photography, and other communication material. • Maintain the Consultation Manager database and generate reports as required. • Drives Communications and Stakeholder Management KPIs as well as the Communications and Stakeholder management component of the Quality of Information and Relationship with the Principal's representative KPI.
Project Training Coordinator	• Develop a Training Needs Analysis to identify relevant environmental training for all contractor (and subcontractor, where appropriate) personnel • Develop environmental training materials in consultation with the Project Environmental Manager • Organise external environmental training courses/material, where required • Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.
Site Foreman (Site Superintendents)	• Construction delivery in relation to environmental management and compliance in conjunction with the Project Environmental Manager • Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts
Subcontractors	• Comply with all legal, contractual requirements and this CEMP • Comply with site environmental requirements • Comply with management / supervisory directions • Participate in induction and training as directed • Report all incidents • Environmental qualifications as required by contract • Must complete project induction covering environmental responsibilities and the Principal Contractor's environmental management system. • Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.
All Personnel	• Comply with the relevant Acts, Regulations and Standards • Comply with the Company's environmental policy and procedures

	• Promptly report to management on any non-conformances, non-compliances environmental incidents and/or breaches of the system • Undergo induction and training in environmental awareness as directed by management • Report all incidents • Act in an environmentally responsible manner • Must complete corporate and project induction covering environmental responsibilities and Downer's environmental management system. • Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.

Independent Environment Representative	• Receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI;
	• Consider and inform the Planning Secretary on matters specified in the terms of this approval;
	• Consider and recommend to Sydney Metro and Downer any improvements that may be madeto work practices to avoid or minimise adverse impact to the environment and to the community;
	• Review documents identified in Conditions C1, C3 and C8 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so:
	  ○ make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary), or
	  ○ make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Planning Secretary);
	• Regularly monitor the implementation of the documents listed in Conditions C1, C3 and C8 to ensure implementation is being carried out in accordance with the document and the terms of this approval;
	• As may be requested by the Planning Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A34 of this approval;
	• As may be requested by the Planning Secretary, assist the Department in the resolution of community complaints;
	• Assess the impacts of minor ancillary facilities as required by Condition A19 of this approval;
	• Consider any minor amendments to be made to the documents listed in Conditions C1, C3 and C8 and any document that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in Conditions C1, C3 and C8 or other documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; and
	• Prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month. The Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI.
	• Must complete project induction covering Principal Contractor's environmental management system.

Independent Certifier	• Assess and certify the Project for compliance, including environmental requirements.

Utilities Coordination Manager	• The management and coordination of all utility work associated with the delivery of the Project, to ensure respite is provided to the community, in accordance with CoA E22; • Establishing a Utilities Project Team with nominated representatives from utility service providers that may be impacted by the CSSI; • Coordination of meetings with utility service providers as requested by Sydney Metro's Contractors; • Involvement with reviews of CSSI designs and Construction methodologies to assist with identifying potentially impacted utility assets; • Assist with coordination of design and Construction methodology reviews by utility service providers to identify necessary utility works; • Communicate with the Utilities Project Team, Sydney Metro, and Sydney Metro's Contractors' delivery teams to understand the proposed program of works to coordinate intercepting, interconnecting and interrelated works and manage priorities as they may arise; • Observation of utility works; and • Manage escalation of utility work-related issues within Sydney Metro and the utility service providers as required. • In conjunction with the Contractors, co-ordinate utility providers and relevant council(s) to identify opportunities for maintenance, replacement or augmentation of utilities that cross the rail corridor and facilitate and co-ordinate requests by the utility providers and relevant council(s) to undertake the Work during rail shutdowns • Collaborate with the communications team and as required, the Community Complaints Mediator, to ensure utility works are appropriately notified and any complaints are resolved.

It is noted that;

- "Subcontractors" and "All personnel" are categorised as "Operational Personnel". All other roles as listed above are categorised as "Management". Refer to Section 3.5 for training requirements for each category.
- Work must not commence until an ER has been approved by the Planning Secretary and engaged by the Proponent.
- The Planning Secretary's approval of an ER must be sought no later than one (1) month before the commencement of Work.
- The proposed ER must be a suitably qualified and experienced person who was not involved in the preparation of the EIS, SPIR or Submissions Report and is independent from the design and Construction personnel for the CSSI and those involved in the delivery of it.

It is the responsibility of Sydney Metro to engage an appropriate ER and seek approval from DPE.

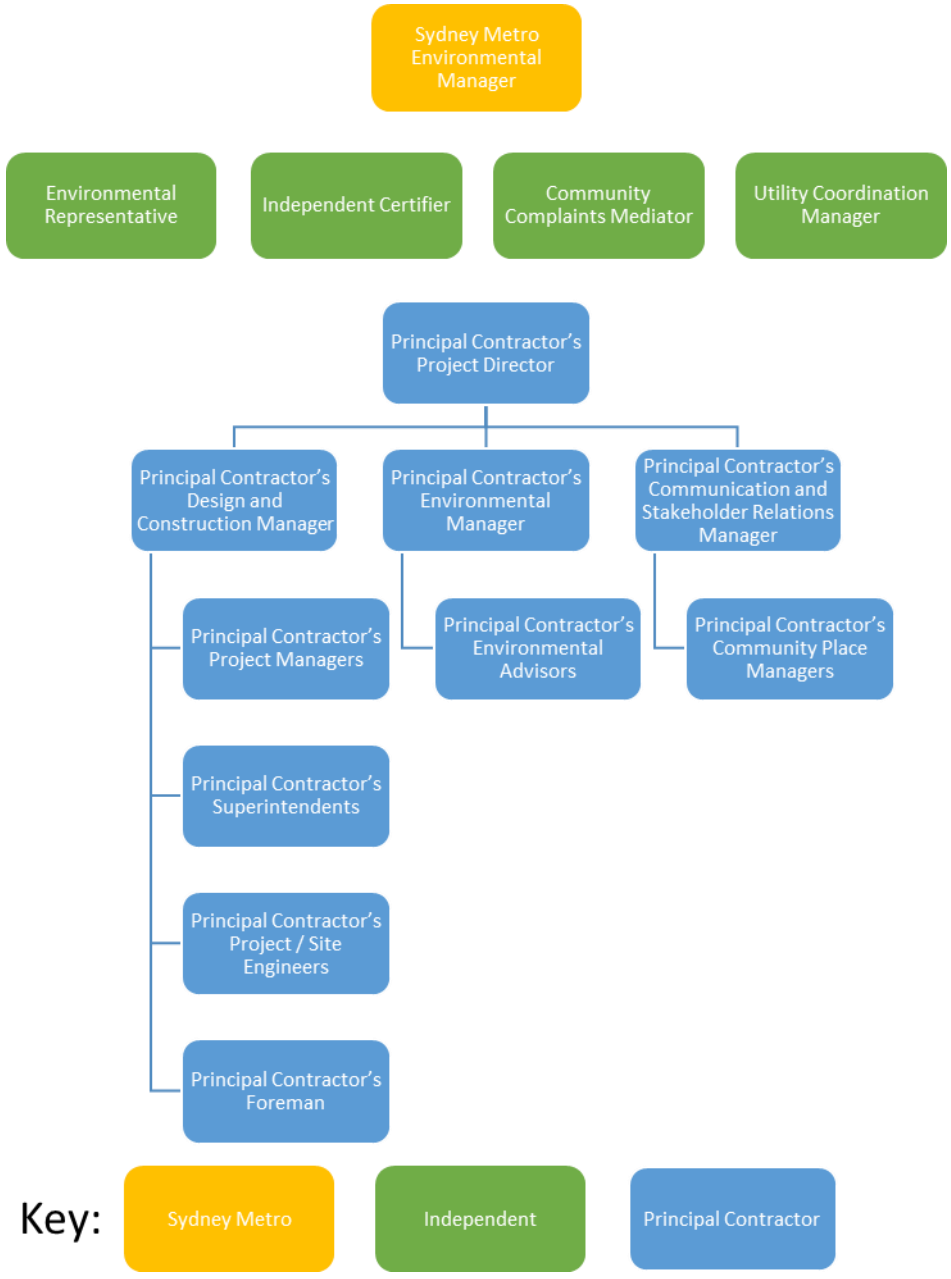

Figure 6 Organisation chart

3.4. Selection and management of subcontractors

Environmental requirements and responsibilities are to be specified to subcontractors in the contract documentation. All subcontractors engaged by DTI will be required to work under DTI's EMS.
The supply of goods and/or services by suppliers and subcontractors will be managed in accordance with the following:

- During the tender phase, supply chain partners will be evaluated by DTI for their ability to meet the project's environmental obligations. Environmental issueswill be considered when selecting subcontractors and suppliers and as provided in the project's Procurement Management Plan;

- Supply, subcontract and consultancy agreements must address the relevant environmental compliance obligations;
- Agreements will outline the contractual requirements to be delivered by the supply chain through their scope of works;
- Suppliers of chemicals and hazardous substances will be required to submit SDS's with delivery or prior to chemicals arriving at site;
- Supply chain partners are to be required to nominate relevant environmental risks and proposed mitigation measures associated with their scope of work within their project specific documentation. As a minimum subcontractors Safe Work Method Statements must address the environmental risks associated with their site activities; and
- The environmental performance of subcontractors will be monitored by Downer during site inspections and in accordance with the obligations in their agreements and contracts.

3.5. Competence, training and awareness

Downer has established 10 Environmental Principles (DG-ZH-PN002) that is a set of fundamental principles that all projects adhere to at all times. The Environmental Principles are prominently displayed on-site in communal areas, on notice boards and the Downer **IMS**.

Downer recognises the importance of employee training and induction, and the critical role it plays in supporting the safe and environmentally responsible conduct of project operations. Downer promotes the following:

- A person must not undertake an activity that pollutes, or might pollute, the environment unless the person takes all reasonable and practicable measures to prevent or minimise any resulting environmental harm.
- In determining what activities are required to be taken, the following are considered (amongst other things):
    - The nature of the pollution or potential pollution and the sensitivity of the receiving environment;
    - The current state of technical knowledge and likelihood of successful application of the activities that might be taken; and
    - The financial implications of the activities that might be taken, as those implications relate to the class of person undertaking activities of the same or a similar kind.

Downer manages project activities in such a manner as to:

- minimise impact to the environmental; and
- educate personnel on their responsibilities relating to protecting the environment.

All personnel have environmental management responsibilities and Downer ensures that these responsibilities are communicated to all personnel via appropriate environmental management training, including the initial environment induction.

3.5.1. Environmental induction

All personnel (including subcontractors) are required to attend a compulsory site induction that includes an environmental component before commencing work on site as per DG-HR-ST013 Training & Competency Management Standard. The environmental component of the induction is tailored for each group of inductees (as applicable) to ensure that specific components of work are adequately addressed. This is to ensure all personnel involved in the Project are aware of:

- the requirements of the CEMP;
- the requirements of the EPL (if required);
- the REMMs and how they are to be implemented;
- the importance of conformance with environmental policy and procedures and the requirements of this CEMP and associated sub-plans;
- DG-ZH-PN002 10 Environmental Principles;
- the significant environmental aspects of the project work and the environmental benefits of improved work performance;
- their roles and environmental responsibilities for achieving conformance with environmental policy and procedures and with this CEMP, including site emergency management and response requirements; and
- the potential consequences of departure from specified operating procedures

This will aid in the prevention of any breaches of the CoA resulting from the actions of all persons invited onto any site, including contractors, subcontractors and visitors.

Short-term or temporary visitors undertaking inspections or entering site (e.g. regulators, delivery drivers) must undertake a visitor's induction and be accompanied by inducted personnel at all times. Subcontractors attending site are assessed by the relevant member of the project team on a case-by-case situation to determine they are required to undertake a visitor induction or full site induction. A visitor induction is valid for a period of 2 weeks.

In accordance with the CEMF, the environmental component of the induction would include as a minimum:

- Training purpose, objectives and key issues;
- Contractor's environmental policy and key performance indicators;
- Due diligence, duty of care and responsibilities;
- Relevant conditions of any environmental licence and/or the relevant conditions of approval;
- Site specific issues and controls including those described in the environmental procedures;
- Reporting procedure for environmental hazards and incidents; and
- Communication protocols.

A record of all environment inductions will be maintained and kept on site. Downer's Environmental Manager may authorise amendments to the induction at any time. Possible reasons for changes to the induction may be Project modifications, legislative changes or

amendments to this CEMP or related documentation. Legible environmental records of all environmental inductions will be kept in an Induction Register.

3.5.2. Toolbox talks, training and awareness

Toolbox talks will be used as a method of raising awareness and educating personnel on issues related to all aspects of Construction including project or site wide updates, any key or recurring environmental issues. The toolbox talks will be used to ensure environmental awareness continues throughout Construction and include details of EWMS for relevant personnel. Toolbox talks will also be tailored to specific environmental issues relevant to upcoming works. Toolbox talk attendance is mandatory and attendees of toolbox talks are required to sign an attendance form and the records maintained.

Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact. All employees (including subcontractors) may receive induction/training in the following (but not limited to):

- Environmental Policy;
- Site environmental objectives and targets;
- Understanding individual authorities and responsibilities;
- Basic understanding of their legal obligations;
- Site environmental rules;
- Emergency procedure and response (e.g. Spill clean-up);
- Relevant project specific and standard noise and vibration mitigation measures;
- Permissible hours of work;
- Any limitations on high noise generating activities;
- Location of nearest sensitive receivers; and
- Relevant licence and approval conditions.

To promote environmental awareness amongst the Construction team, environmental alerts will be issued as required and distributed amongst Downer's Project / Site Engineers and Supervisors which will be discussed during the daily pre-start meeting or during toolbox talks. In addition, the ECMs will be displayed in crib sheds and site offices to promote awareness of the environmental constraints. Erosion and Sediment Control Plans (ESCPs) will be distributed to Downer's Site Foreman to provide detail on erosion and sediment controls on the Project.

Environmental awareness may also be promoted to Construction personnel through the development and distribution of awareness notes. These will typically take the form of a poster, booklet, or similar and will be distributed to Downer's Engineers, Leading Hands, Site Foreman and others with a responsibility for managing specific work locations or activities. This documentation may be used to inform the broader workforce through either daily pre-start meetings (see Section 3.5.3) or provision in worker crib sheds / break facilities.

In accordance with the CEMF, Downer will conduct a Training Needs Analysis which identifies the competency requirements of staff that hold environmental roles and responsibilities as outlined in Table 8. This CEMP will be revised to include a summary of Downer's Training Needs Analysis.

Employee training and competency requirements are reviewed annually, or as an employee's role changes. Downer maintains a database of training records and employee competencies that provides capabilities such as tracking expiry of time limited competencies and programming of training requirements. This is done via the Training Matrix included in Appendix J.

A Training Register is to be maintained on Downer's information management system.

3.5.3. Daily pre-start meetings

The daily pre-start meeting is a tool for informing the workforce of the day's activities, safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, coordination issues with other trades, hazards and other information that may be relevant to the day's work.

Downer's Site Foreman will conduct a daily pre-start meeting with the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. Daily pre-start meetings will be succinct in nature and generally take approximately 10-15 minutes.

The environmental component of pre-starts will be determined by Downer's relevant Site Foreman and environmental personnel and will include any environmental issues that could potentially be impacted by, or impact on, the day's activities as required. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained.

3.6. Working hours

Working hours for the Project are set by the CoA E19 to E26. Standard Construction hours as approved in the CoA E19 are as follows:

- Monday to Friday: 7:00 am to 6:00 pm;
- Saturday: 8:00 am to 6:00 pm; and
- At no times on Sundays or Public Holidays.

CoA E20 permits work outside of the hours specified in CoA E19, in the following circumstances:

a) For the delivery of materials required by the NSW Police Force or other authority for safety reasons;

b) Where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm;

c) Where different Construction hours are permitted or required under an EPL in force in respect of the CSSI;

d) Work approved under an Out-of-Hours Work Protocol for Work not subject to an EPL as required by Condition E25;

e) Construction that causes LAeq(15 minute) noise levels:

i. no more than 5 dB(A) above the rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009), and

ii. no more than the 'Noise affected' noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC, 2009) at other sensitive land uses, and

iii. continuous or impulsive vibration values, measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006), and

iv. intermittent vibration values measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006).

f) Where a negotiated agreement has been reached with a substantial majority of sensitive receivers who are within the vicinity of and may be potential affected by the particular Construction, and the noise management levels and/or limit for ground-borne noise and vibration (human comfort) cannot be achieved. All agreements must be in writing and a copy forwarded to the Planning Secretary at least one (1) week before the commencement of activities.

In accordance with CoA E24, except as permitted by an EPL, highly noise intensive works that result in an exceedance of the applicable NML at the same receiver will only be undertaken:

- Between the hours of 8:00 am and 6:00 pm Monday to Friday;
- Between the hours of 8:00 am and 1:00 pm Saturday; and
- In continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block. 'Continuous' includes any period during which there is less than one-hour respite between recommencing any of the work that are the subject of the CoA.

There is no definition in the CoA SSI 8256 for "Highly Noise Intensive Works" as mentioned in CoA E24. Sydney Metro has adopted the following definition for "Highly Noise Intensive Works", based upon definitions within CoA issued by DPE for other SSI projects. For the purpose of this Project, Highly Noise Intensive Works are Construction activities which are defined as annoying under the ICNG, these include:

- Use of power saws, such as used for cutting timber, rail lines, masonry, road pavement or steel work;
- Grinding metal, concrete or masonry;
- Rock drilling
- Line drilling;
- Vibratory rolling;
- Rail tamping and regulating;
- Bitumen milling or profiling;
- Jackhammering, rock hammering or rock breaking; and
- Impact piling.

Any other works outside of standard Construction hours would be permitted providing they meet the requirements of CoA E20, an EPL (if applicable) or if they are undertaken as per the City and Southwest Out-of-Hours Work Protocol/Strategy (OOHW) as per CoA E25.

3.7. Communication

Achieving effective communication between all parties is critical to ensure that the requirements of this CEMP are met.

Downer uses a number of methods to communicate with employees, subcontractors, and visitors. The requirements, frequency, information, and methods of recording communication are outlined in the project's Stakeholder & Communication Management Plan, Zero Harm Worker Consultation Standard (DG-ZH-ST013), and project's Zero Harm risk management processes and procedures.

Typical methods of communication on site:

- pre-start meetings
- Zero Harm start-up (i.e. pre-commencement) toolbox talks
- Zero Harm inductions
- noticeboards
- toolbox talks; and
- environment alerts.

Pre-start and toolbox meetings include delivering key environmental messages and audit and inspection results and communicating environmental risks for the scheduled activities.

Pre-start meetings are minuted, and the minutes reviewed and signed by the meeting chairperson and made available to all Downer workers and visitors (if applicable) on site.

The Project Manager ensures that relevant documentation is filed electronically, and hard copies made available to personnel. Hard copy documentation made available to personnel typically includes:

- the project's Emergency Management Plan
- standard operating procedures
- work instructions
- Sydney Metro procedures/ policies
- fatal risk control standards
- risk assessments
- minutes of meetings; and
- copies of pertinent legislation and codes of practice.

Downer's dispute resolution process meets the requirements of the *Work Health and Safety Regulation 2017* and is included in Zero Harm Worker Consultation Standard (DG-ZH-ST013).

3.7.1. Internal communication

Clear lines of communication throughout all levels and functions (e.g. management, staff and subcontracted service providers), are key to minimising environmental impacts and achieving continual improvements in environmental performance.

Downer's environmental team will meet regularly to discuss any issues with environmental management on site, any amendments to plans that might be required or any new / changes to Construction activities. Regular meetings may also be scheduled with the ER, Sydney Metro environmental personnel. The purpose of these meetings would be to communicate ongoing environmental performance and to identify any issues to be addressed.

In addition, Construction environmental team members will participate, as required, in toolbox talks, daily pre-start meetings or activity specific pre-start meetings to communicate environmental performance, management or issues with the wider Construction team. This forum will provide an opportunity for the environment team members to advise on any upcoming sensitive environmental matters for future work areas and to receive feedback from on-site personnel.

Further internal communications regarding environmental issues and aspects will be through awareness training as described in Section 3.5.

3.7.2. Liaison with government authorities or other relevant stakeholders

Downer's Environmental Manager will be the authorised contact person for communications with the relevant stakeholders i.e. Sydney Metro, the ER, DPE and the EPA (if required) on environmental matters. Liaison will include reporting on the ongoing environmental performance, any key environmental matters on the Project to these stakeholders. Relevant government agencies will be consulted throughout Construction as required.

Where changes are made to the CEMP or Sub-plans following consultation, updates will be recorded in the relevant version control section(s).

Incident notification will be undertaken in accordance with the requirements of CoA A36 and A37 (refer to Section 3.10.3).

Liaison with government authorities and relevant stakeholder would be undertaken as per Section 8 of the Sydney Metro Overarching Community Communication Strategy (OCCS).

3.7.3. Community liaison and/or notification

Direct communication with the media and general public is not permitted. Any requests from the media or general public are referred to the Project Manager who acts in accordance with the project's Stakeholder & Communication Management Plan.

All direct communication with statutory authorities is approved by the Project Manager or the Safety Manager.

Sydney Metro also has specific requirements relating to external communications.

Sydney Metro has prepared an OCCS in accordance with CoA B2 to provide an approach to stakeholder and community communications. This plan identified opportunities and key communication tools needed to provide information and consult with the community and stakeholders during Construction of the Project. Section 8 of the OCCS outlines how community liaison and/or notification would be undertaken.

The OCCS also includes the process for notifying external stakeholders of new, changed or upcoming Construction works, including works outside of normal working hours. The OCCS has been submitted to DPE for approval prior to the commencement of works in accordance with CoA B3.

In accordance with Section 1 of the OCCS, the contract-specific communication team is responsible for developing a contract-specific Community Communication Strategy (CCS) for the Project.

3.7.4. Complaints management

In the event of a third-party environmental complaint the following steps will be taken by Downer:

- records complaints as an incident in INX
- investigates and verifies complaints, and assesses if excessive off-site impacts have occurred
- implements corrective measures including modification of execution methods and operational techniques to avoid recurrence or minimise ongoing adverse impacts
- completes monitoring/ additional investigations to verify the adequacy of the recommendations, as required
- notifies the complainant of actions taken; and

continues to monitor activity, if required.

Sydney Metro's OCCS details the Complaints Management System, which includes a Complaints Register, which has been developed for the Project, in accordance with the requirements of AS 4269: Complaints Handling and CoA B5, B6, B7, B8 and B9.

As required by CoA B8(a)(b)(c) the Complaints Register must record the:

a) Number of complaints received

b) Number of people affected in relation to a complaint

c) Means by which the complaint was addressed and whether resolution was reached, with or without mediation.

The Complaints Register will be provided to the ER on a daily basis, in accordance with CoA A27(a). Please refer to the OCCS for more information about complaints management.
Sydney Metro's OCCS also outlines how the Project will interface with the Community Complaints Mediator, as required, in accordance with CoA B10 to B13.

3.8. Emergency and incident response

In accordance with Emergency Management Procedure (DG-ZH-PR015), the project team establishes an Emergency Management Plan for the project which addresses all emergency response scenarios. Common types of environmental emergencies include:

- sewage spills (to land or to water)
- emulsion spills (to land or to water)
- hydrocarbon spills (to land or to water)
- sediment discharge (to land or to water)

- unexpected finds (cultural heritage); and
- damage to heritage items or protected flora and fauna.

In the event of an incident that may have resulted in a near miss or an impact to the environment or community, Downer employees are expected to respond appropriately in accordance with Incident Management Procedure (DG-ZH-PR006) and the Sydney Metro Incident and Non-compliance Reporting Procedure.

3.8.1. General emergency and incident response

The EPA must be notified immediately of all pollution incidents that cause or threaten material harm to the environment. Downer will enact the Emergency Response Plan if an incident causes or has the potential to cause material harm.

As per the Planning Approval's definition, material harm "*is harm that:*

- *involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or*
- *results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).*"

If an incident presents an immediate threat to human health or property, 000 is to be called in accordance with the procedures outlined in the Construction Health and Safety Management Plan.

The EPA Environment Line is to be contacted on 131555.

The notification will need to include information on:

- The time, date, nature, duration and location of the incident;
- The location of the place where pollution is occurring or is likely to occur;
- The nature, the estimated quantity or volume and the concentration of any pollutants involved;
- The circumstances in which the incident occurred (including the cause of the incident, if known);
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution; and
- Other information prescribed by the regulations.

In addition to notifying the EPA of pollution incidents other authorities as outlined below must also be notified immediately, where relevant:

- Sydney Metro;
- The ER;
- DPE;
- The NSW Ministry of Health (via the local Public Health Unit – 02 9391 9000);
- The SafeWork NSW (13 10 50);

- Inner West Council (where the incident has occurred within this LGA) – (02 9707 9000);
- City of Canterbury Bankstown (where the incident has occurred within this LGA) – (02 9392 5000); and
- Fire and Rescue NSW on 000.

Regardless of the actual or potential impact, these authorities must be notified under the amended legislation for all notifiable pollution incidents. Further information in relation to the incident must be provided immediately if it becomes available after the initial notification. Records of contact with and details of the information provided to external authorities must be maintained in the project records.

Incident notification will be undertaken in accordance with the requirements of CoA A36 and A37 and the Sydney Metro Incident and Non-compliance Reporting Procedure (refer to Section 3.10.3 and Appendix F).

3.9. Monitoring, inspections and auditing

3.9.1. Environmental inspections

Ongoing inspection of environmental mitigation measures will be undertaken by Downer's Site Foreman. Weekly site environmental inspections will be undertaken by Downer's Environmental Manager to assess the ongoing effectiveness and suitability of the Project's environmental controls. The site environmental inspections will cover the following:

- High risk activities and processes;
- Work in environmentally sensitive areas; and
- Site preparedness for adverse weather conditions, including adequacy of environmental controls and availability of emergency equipment.

Copies of all environmental inspection reports prepared by Project environmental staff will be kept with the Project records and closed out within the agreed timeframes. These timeframes will be dependent on the nature of the required corrective action and the environmental risk associated with the outstanding action as determined by Downer's Environmental Advisor or Environmental Manager. The outcomes of inspections will be captured on Environmental Inspection Checklists.

In general, the corrective action will concentrate on the environmental management system and its associated processes rather than on the perceived deficiencies of individual workers.

If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded in an environmental action list. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority. The environmental action list will then be issued to the relevant Downer Site Foreman for actioning. Actions will be assigned an implementation priority by Downer's Environmental Advisor based on environmental risk. Actions are closed out by Downer Site Foreman and evidence of close out (usually a photograph) is to be supplied back to the Environmental Advisor.

When an observation is raised of a significant nature, and where deemed necessary by Downer's Environmental Manager, an Environmental Improvement Notice (EIN) may be issued to either the Engineering Supervisor or the subcontractor supervisor in charge of the work activity and/or an individual. The engineer or individual receiving the improvement notice

will be required to respond to the agreed corrective action as outlined on the notice. The timeframe to respond would be determined by Downer's Environmental Manager and documented in the EIN. Examples of observations deemed to be of a significant nature would include, but are not limited to, those that require immediate action due to potential environmental risk or recurring issues.

The completed EIN must be reviewed and followed-up to ensure they are promptly completed. Repetitive observations that have significant hazards should be reviewed to check that a system failure is not occurring. Downer's Environmental Advisor will confirm close out of the EIN and report this to Downer's Environmental Manager.

Regular site inspections will be completed by the Environmental Representative (ER) and Sydney Metro representatives. These will be conducted at a frequency to be agreed by all parties. However, at minimum they will have a monthly frequency.

In addition to planned internal audits, the project team verifies environmental conformance to this document as per the reviews in the following table and DG-ZH-PR116.1 Inspections Procedure.

Type of Review	Goal	Frequency	Responsible Person
Solid Wastes	▪ All waste removed from the site will be appropriately tracked from 'cradle to grave' using waste tracking dockets. ▪ Waste minimisation through implementation of the waste hierarchy ▪ Recycling where practical and economically feasible. ▪ Appropriate use of landfill site for disposal. ▪ Appropriate placement and use of site amenities. ▪ Compliance with Waste and Spoil in Appendix E in CEMP	▪ Informal daily monitoring by site team ▪ Weekly inspections will include checking on the waste storage facilities on site using the Environment Inspection Checklist ▪ Audits of receiving facilities (recyclers/landfills/other) minimum of 1 every 6 months)	▪ Environmental Advisor/ Project Manager (PM)
Flora and Fauna	▪ Protection of protected species ▪ Prevent the spread of weeds ▪ Compliance with Biodiversity in Appendix E in CEMP.	▪ Informal daily monitoring by site team ▪ Weekly inspections using the Environment Inspection Checklist	▪ Environmental Advisor/ Project Manager (PM)

Type of Review	Goal	Frequency	Responsible Person
Erosion and Sediment Control Measures	▪ No adverse impacts to receiving water quality ▪ Implementation, monitoring, and maintenance of all soil erosion and sediment control measures defined in the Soil & Water Management Plan and associated documents.	▪ Informal daily, ▪ Weekly inspections using the Environment Inspection Checklist	▪ Environmental Advisor/ Project Manager (PM)
Work site storage and handling of fuels, oils, chemicals, and paints	▪ Compliance with dangerous substances regulations and hydrocarbons and chemicals procedures defined in the project's Health and Safety Management Plan.	▪ Informal daily monitoring by site team ▪ Weekly inspections using the Environment Inspection Checklist	▪ Site Supervisor / Zero Harm Advisor / Environmental Advisor / Project Manager (PM)
Hydrocarbon and Oil Spills	▪ Compliance with the project's Health and Safety Management Plan.	▪ Daily visual monitoring by site team ▪ Weekly inspections using the Environment Inspection Checklist	▪ Site Supervisor / Environmental Advisor / Project Manager (PM)
Air Quality and Dust Management	▪ Minimise the impact of dust, odour and fumes on the community ▪ Compliance with the Air Quality in Appendix E in CEMP.	▪ Visual monitoring by Zero Harm Advisor and/or Site Supervisor. ▪ Spot checks of sites and weekly inspections using the Environment Inspection Checklist	▪ Site Supervisor / Zero Harm Advisor / Environmental Advisor / Project Manager (PM)

Type of Review	Goal	Frequency	Responsible Person
Water management	▪ Avoid the use of potable water where possible ▪ Protect environmental values of receiving water ▪ Compliance with the TfNSW Water Discharge and Reuse Guideline ▪ Compliance with the Soil and Water Management Plan	▪ As required – to be monitored through dewatering applications and permits ▪ Daily informal monitoring by Site Supervisor and site team ▪ Weekly using Environment Inspection Checklist	▪ Site Supervisor / Environmental Advisor / Project Manager (PM)
Heritage	▪ Protect items with heritage value ▪ Maintain compliance with the Heritage Management Plan	▪ Daily informal monitoring by Site Supervisor and site team ▪ Weekly using Environment Inspection Checklist ▪ Heritage-specific inspections to be carried out before, during and after vibration-generating works within ‘safe working distances.	▪ Site Supervisor / Environmental Advisor / Project Manager (PM)
Noise and Vibration	▪ Reduce the impact of noise and vibration on sensitive receivers ▪ Maintain compliance with the Project Noise and Vibration Management Plan	▪ As per Appendix A of the Construction Noise and Vibration Monitoring Guideline of City and Southwest Construction Noise and Vibration Strategy (SM ES-ST-210) ▪ Refer to SM CEMF Section 9 Construction Noise and Vibration Management	▪ Environmental Advisor / Project Manager (PM)

Type of Review	Goal	Frequency	Responsible Person
Additional risk -mitigation measures	▪ Compliance to SWMS requirements and the CEMP and any relevant sub-plans.	▪ Daily informal monitoring by Site Supervisor and site team ▪ Weekly using Environment Inspection Checklist	▪ Environmental Advisor / Project Manager (PM)
Housekeeping	▪ Tidy work site with no litter and all waste contained in appropriate containers. ▪ Containers to be emptied and disposed of at appropriate intervals. ▪ Compliance with all Sub Plans	▪ Daily informal monitoring by Site Supervisor and site team ▪ Weekly using Environment Inspection Checklist;	▪ Environmental Advisor / Project Manager (PM)

3.9.2. Environmental monitoring

Environmental monitoring will be undertaken to validate the impacts predicted for the Project, to measure the effectiveness of environmental controls and implementation of this CEMP, and to address approval requirements. The monitoring requirements for required aspects are included in the relevant environmental management Sub-plans and summarised in Table 9.

Table 9 Summary of Construction phase environmental monitoring required by the Project approval

CoA / EMM	Description	Relevant Sub-plan or CEMP Chapter	Reporting Requirements
C8(a)	Noise and Vibration Monitoring Program	NVMP – Section 8	Submitted to the Planning Secretary and relevant regulatory authorities for information at a frequency as specified in the monitoring program.
C8(b)	Water Quality Monitoring Program	SWMP – Section 6	Submitted to the Planning Secretary and relevant regulatory authorities for information at a frequency as specified in the monitoring program.

3.9.3. Auditing

Sydney Metro's *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report* (Sydney Metro 2019) has been prepared to satisfy the obligations of CoA A33-A35. In accordance with the *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report*, two levels of environmental auditing will be undertaken on the Project:

- Internal auditing coordinated by the Principal Contractor; and
- Via the independent Environmental Audit Program (EAP).

These audits will be conducted at the frequency outlined within the Audit Schedule, an Indicative version of this is contained within Appendix K.

In addition to these, the Project may be audited by the Secretary upon the Secretary's request. In this event, the ER will facilitate the audit on behalf of the Secretary in accordance with CoA A26(f).

Audits will include works undertaken by subcontractors. Internal and external environmental audits will be undertaken and prepared in accordance with the terms of the project approval and AS/NZS ISO 19011:2014.

The ER will ensure that environmental auditing is undertaken in accordance with this CEMP and the Project's environmental management system, in accordance with CoA A26.

Internal audits undertaken in accordance Section 4.4.3.1 of the *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report* will be carried out on a six-monthly basis. Independent Environmental Auditing will be conducted at a frequency set out in the EAP.

Downer conducts internal environmental audits in accordance with Downer's Internal Audits Procedure (DG-QA-PR003) to ensure the ongoing adequacy and effectiveness of the **IMS** (which includes the EMS)**,** and to facilitate continuous improvement.

Environmental audits are planned and scheduled with all other project audits, and detail the type of audit, duration, auditors (including the Lead Auditor), and dates. Refer to the project's Quality Management Plan for further information.

The findings from internal audits on the implementation of the requirements of this document and **IMS** for the project are provided to the Project Manager. Any Sydney Metro requirements for audits are also defined in the project's Quality Management Plan.

Audits are conducted by personnel with the relevant expertise.

In addition to planned internal audits, the project team verifies environmental conformance to this document as per the reviews in the table in Section 3.9.1 environmental inspections and Downer's Inspections Procedure (DG-ZH-PR116.1).

3.9.4. Construction phase compliance tracking

In accordance with CoA A29 to A32, Sydney Metro has developed the *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report*. Compliance reporting on the Project will be undertaken in accordance with the requirements of this document throughout the Construction phase of the Project.

In accordance with the *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report,* Downer will undertake quarterly reviews of the compliance requirements contractually allocated to them by Sydney Metro. These reviews are a collaborative exercise undertaken between Downer, Sydney Metro and the ER. The Compliance Tracking Review process is as follows:

- Upon the award of each major contract, Sydney Metro to issue a Compliance Tracking Register (CTR) template containing a list of all the compliance

requirements contractually allocated to Downer. Downer is required to complete the template and return to Sydney Metro no later than two weeks prior to the anticipated commencement of Construction activities.

Downer is to complete the template by demonstrating how compliance against each requirement has been addressed from the date of contract award to the date the CTR is due to be returned to Sydney Metro (including references to evidential documentation). This completed CTR will be used by Sydney Metro to prepare any documentation required to prepare/update the applicable Pre-Construction Compliance Report

- Following the commencement of Construction, Downer is to complete a new CTR to cover all activities from the commencement of Construction until the end of the existing or subsequent calendar quarter (as determined by Sydney Metro). Downer must issue the completed CTR to the ER within five working days following the end of the reporting period. The ER will review the CTR and where necessary, provide comments and/or requests for evidence to Downer. The ER will provide the Planning Approvals Compliance Report only after all comments have been addressed, and all evidence requested during the CTR has been provided by Downer.
- Within five working days of receiving the final completed CTR (and any evidence requested) from Downer, the ER is to issue a draft Planning Approvals Compliance Report (with the associated completed CTR) to Sydney Metro for comment. After reviewing any comments, the ER is to issue a final Compliance Summary Report to Sydney Metro.
- Following receipt of the final Compliance Summary Report from the ER, Sydney Metro will issue the next quarterly period CTR template to Downer for completion. This process repeats every quarter until all compliance requirements have been 'completed' (refer to Section 4.3 of the City and Southwest Compliance Monitoring/Tracking and Reporting Program Report).

In the event of a non-compliance against a requirement at any time during this process, a summary of the non-compliance needs to be entered into the relevant CTR template. This is in addition to the requirements of the Sydney Metro Environmental Incident and Non-Compliance Reporting Procedure SM-17-00000096 (refer to Appendix F).

Downer compliance tracking is undertaken on a continuous nature during execution using Downer's compliance management system INX, which allows authorised users to:

- access the Compliance Tracking Database, Incident Reporting Database, and Complaints Register; and
- sort and evaluate the compliance status of all conditions at any time.

The Compliance Tracking Database includes a protocol to address:

- auditing requirements;
- reporting requirements;
- incident response mechanisms; and
- Compliance with SM quarterly *Compliance Monitoring/Tracking and Reporting Program Report*.

3.10. Environmental incidents non-conformances and non-compliances

All environmental incidents, non-conformances and non-compliances must be reported to the ER and Sydney Metro in accordance with Sydney Metro Environmental Incident and Non-compliance Reporting Procedure SM-17-00000096 (refer to Appendix F).

3.10.1. Environmental incidents under Sydney Metro

The Environmental Incident and Non-compliance Reporting Procedure is summarised below.

Sydney Metro has defined an Environmental Incident as:

> *An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred or is likely to have occurred.*
>
> *Adverse environmental impact includes contamination, harm to flora and fauna (either individual species or communities), damage to heritage items, or adverse community impacts.*

The Instrument of Approval defines an incident as:

> *An occurrence or set of circumstances that causes or threatens to cause material harm[1] and which may or may not be or cause a non-compliance.*

Environmental incidents are classified into three classes that are based upon the consequence descriptors for environmental risks in the Sydney Metro Risk Matrix (refer to Sydney Metro Risk Management Standard). These classifications trigger a variety of management actions and/or legislative requirements depending on the severity of the consequence described where Class 3 represents minor consequences and Class 1 represents major consequences.

This matrix is further sub-divided into consequence ratings ranging from C6 (low impact) to C1 (high impact). An incident transitions between a Class 3 to a Class 2 incident once material harm has been caused, and transitions into a Class 1 incident once it is determined that the Environmental Harm caused is large-scale and cannot be remediated (see Table 10).

Table 10 Classification System for Environmental Incidents

Class 3			Class 2	Class 1	
C6	C5	C4	C3	C2	C1
No appreciable changes to environment and/or highly localised event	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries	Short-term and/or well-contained environmental effects. Minor remedial actions probably required	Impacts external ecosystem and considerable remediation is required	Long-term environmental impairment in neighbouring or valued ecosystems Extensive remediation required	Irreversible large-scale environmental impact with loss of valued ecosystems

[1] Material harm is harm that: (a) involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or (b) results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

All incidents and complaints (including potential incidents) must be reported so that they can be investigated and prevented from recurring. Incidents, non-conformances and non-compliances are to be recorded using the Environmental Incident and Non-compliance Report Form (SM ES-FT-403), by Downer. It is expected that the person responsible for completing the Environmental Incident and Non-compliance Report Form makes appropriate enquiries to determine the likely causal factors involved and assigns effective corrective actions. Corrective actions are to be raised, addressed and closed-out in accordance with Downers own internal relevant management system procedure. When an environmental incident occurs which causes environmental harm, in all cases both verbal and written communication of the incident must be carried out immediately and within 48 hours respectively. For Class 1 and 2 Incidents the notification process shown in Figure 7 must be followed. Incident Notification Reports satisfy the requirement for written communication to Sydney Metro and are to be completed using the Environmental Incident and Non-compliance Notification Report (SM ES-FT-403) or a similar and consistent form approved by Sydney Metro.

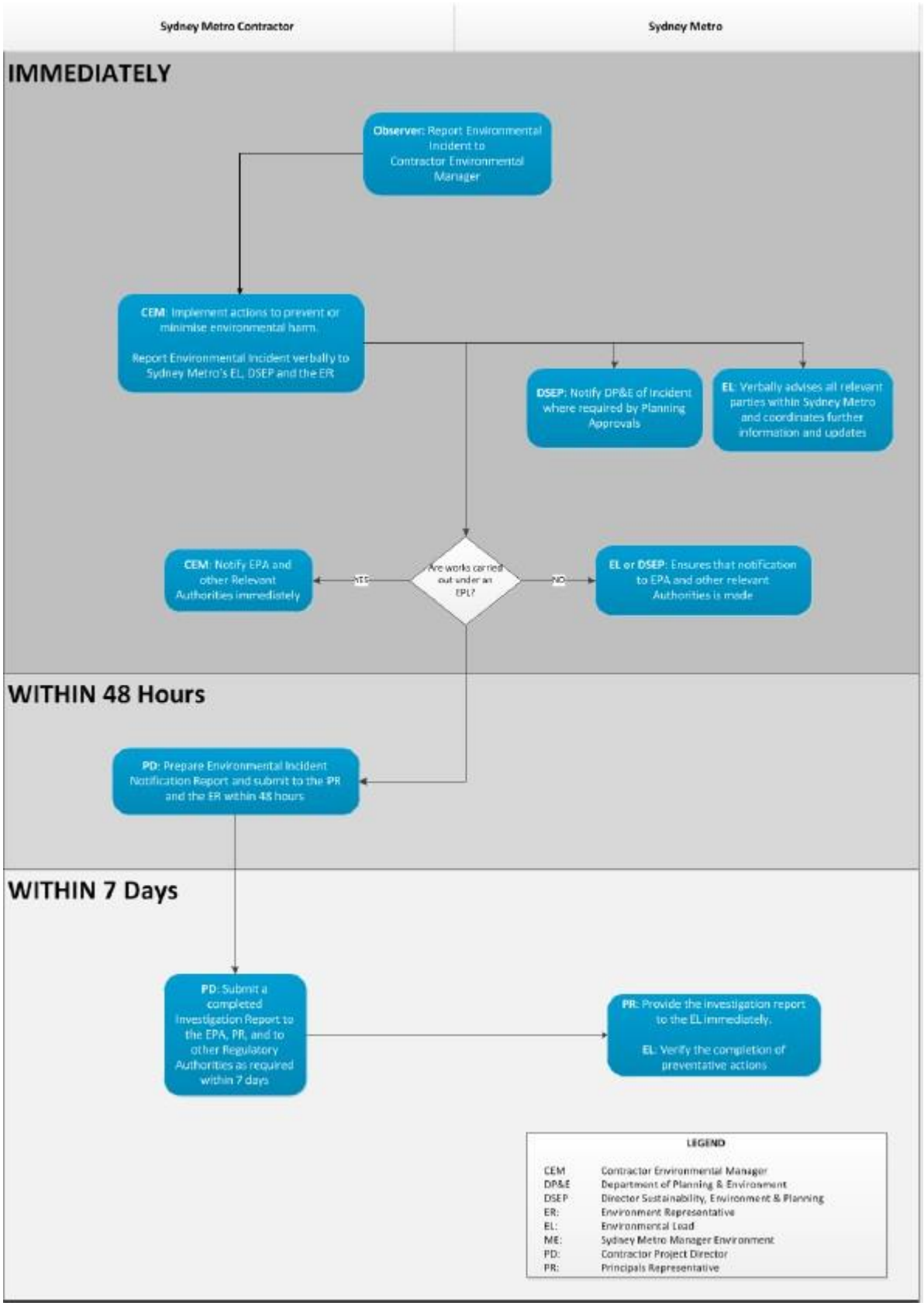

Figure 7 Environmental incident notification process for Class 1 and 2 Incidents

3.10.2. Review of compliance

An environmental non-compliance is a breach of an environmental requirement originating from Planning Approvals, EPLs, lease agreements, and other requirements documented in environmental management plans. Whether an event is classified as a Non-compliance, Non-conformance or an Incident the process behind managing the event remains the same, with the following exceptions:

- Non-compliances are not notifiable to Regulatory Authorities under the POEO Act;
- Non-compliances are reported to have occurred on the day the breach was raised as opposed to the date when the requirement was breached;
- Non-compliances are not divided into severity classes;
- Non-compliances do not have the potential to trigger crisis or emergency management processes; and
- There is an informal notification process in the immediate timeframe following a Non-compliance being raised.

When an Environmental Event (as defined by the Sydney Metro Environmental Incident and Non-compliance Reporting Procedure) occurs that causes Environmental Harm and also breaches one or more Environmental Requirements, then an Incident Notification Report will be created which records what requirements were breached.

If a Non-compliance is identified, then it must be raised using the Environmental Incident and Non-compliance Report Form within 48 hours by the party responsible for the breach.

Downer's subcontractors found to be in breach of this document are managed in accordance with the subcontract under which they have been engaged.

Employees who breach the requirements of this document are managed in accordance with the project's Employee Relations Management Plan. Personnel found to be grossly negligent or commit an intentional environmental breach are removed from site and managed in accordance with the project's Employee Relations Management Plan.

Non-compliances raised by Sydney Metro and via internal project audits are registered and controlled in accordance with Downer's Incident Management Procedure (DG-ZH-PR006).

Possible non-compliances include non-compliance with the management measures outlined in this document, and mitigation strategies/ management measures outlined in the Environmental Management sub-plans.

Where detected, any non-compliance or environmental impact exceeding specified limits are investigated by the Environmental Advisor to determine the extent of possible non-conformance. The non-compliance is corrected as soon as possible with necessary action taken to prevent recurrence.

All non-compliances are reported to Sydney Metro and clearly identify the corrective/ preventative actions to be taken and the close-out date.

3.10.3. Department of Planning and Environment incident notification

The Conditions of Approval define an incident as:

An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not cause a non-compliance with this approval.

Environmental incident and notification requirements are outlined in CoA's A36 and A37 and Appendix A of the Instrument of Approval. These requirements are outlined in Table 11. Any incidents would be notified to the Planning Secretary in accordance with these requirements.

Table 11 Incident notification to DPE

CoA/Requirement	Details
CoA A36	The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and nature of the incident.
CoA A37	Subsequent notification must be given, and reports submitted in accordance with the requirements set out in **Appendix A (of SSI-8256)**.
Appendix A - 1	A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven (7) days after the Proponent becomes aware of an incident. Notification is required to be given under this condition even if the Proponent fails to give the notification required under Condition A37 or, having given such notification, subsequently forms the view that an incident has not occurred.
Appendix A - 2	Written notification of an incident must: (a) identify the CSSI and application number; (b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); (c) identify how the incident was detected; (d) identify when the Proponent became aware of the incident; (e) identify any actual or potential non-compliance with conditions of approval; (f) describe what immediate steps were taken in relation to the incident; (g) identify further action that will be taken in relation to the incident; and (h) identify a project contact for further communication regarding the incident.
Appendix A - 3	Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Proponent must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
Appendix A - 4	The Incident Report must include: (a) a summary of the incident; (b) outcomes of an incident investigation, including identification of the cause of the incident; (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and (d) details of any communication with other stakeholders regarding the incident.

3.11. Work in environmentally sensitive areas

Addressed in Section 3.2.3 of this CEMP.

3.12. Ancillary site facilities

Ancillary site facilities used as part of the Project are discussed in Section 1.1.

3.12.1. Ancillary facilities approval pathways

Ancillary facilities proposed to be used as part of the Project are discussed in Section 1.1. However, any ancillary facilities outlined in the Approval Documents may be used by the Project.

As per CoA A16 ancillary facilities not identified in the Approval Documents can be established and used if:

a) they are located within the Construction boundary of the CSSI; and

b) they are not located next to a sensitive receiver (including access roads) (unless landowners and occupiers have accepted in writing the carrying out of the relevant facility in the proposed location); and

c) they have no impacts on heritage items (including areas of archaeological sensitivity), and threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and

d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.

If proposed ancillary facilities are not identified in the Approval Documents and cannot satisfy the conditions of CoA A16 they can only be established and operated when a review of environmental impacts has been prepared as per CoA A17. When the proposed ancillary facility is located within the rail corridor the review of environmental impacts may be endorsed by the ER. When the proposed ancillary facility is located outside the rail corridor the review of environmental impacts would require approval of the Planning Secretary.

Minor ancillary facilities are defined in CoA A19 as:

> *Lunch sheds, office sheds, portable toilet facilities, and the like, that are not identified as an ancillary facility in the documents listed Condition A1*

As per CoA A19, minor ancillary facilities can be established where they satisfy the following criteria:

a) are located within the Construction boundary; and

b) have been assessed by the ER to have –

i. minor amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (ICNG) (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and

ii. minor environmental impact with respect to waste management and flooding, and

iii. no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.

In accordance with CoA A18, the use of an ancillary facility for the Construction of this Project must not commence until this CEMP and the Project's Sub-plans (including monitoring programs therein), have been approved by the Planning Secretary.

3.12.2. Boundary screening approach

Boundary screening will be erected around ancillary facilities that are adjacent to sensitive receivers as required under CoA A20 and A21. This will be for the duration of Construction unless otherwise agreed with relevant councils, and affected residents, business operators or landowners. All boundary screening will minimise visual, noise and air quality impacts as required by CoA A21. Boundary screening at sites would be consistent with the requirements identified in the Construction Noise and Vibration Impact Statement's (CNVIS) (refer to NVMP). All fencing and hoarding will be in accordance with the requirements of the OCCS.

3.13. Hold points

The activities outlined in Table 12 are not to proceed without objective review and approval by the nominated authority. These activities are considered hold points. The hold points should be incorporated into the working plans for the project (EWMS, work instructions, Construction methodologies, etc.).

Table 12 Hold points

Item	Process Held	Acceptance Criteria	Approval Authority
Construction Environmental Management Plan and Sub-plans	Site activities	Site specific Construction Environmental Management Plan and Sub-plans have been developed, reviewed and approved.	Department of Planning and Environment.
Monitoring Program Amendments (CoA C13)	Amendments to Monitoring Program(s) (during Construction, as per CoA C13)	Amendments have been reviewed and approved for implementation.	ER Endorsement and Approval
CNVIS	Site activities (Prior to Construction commencement)	CNVIS to be prepared by Specialist Consultant.	ER Endorsement
Specific Environmental Control Maps (ECMs)/ progressive ESCPS	Dulwich Hill Station works Campsie Station works Punchbowl Station works	ECMs/PESCPs are developed with site specific environmental controls/mitigation measures with site supervisor/engineers for work activities and are to be implemented prior to works commencing (or a new work stage as appropriate).	Environmental Manager or Coordinator
Works that require a Project Approval Consistency Assessment	Specific site activities related to Consistency Assessment.	Consistency Assessment approval.	Sydney Metro (Approval)
Reuse or Discharge of water	Dewatering activities (During Construction)	Implementation of requirements within Section 5.2 of SWMP, prior to any discharge off the premises or reuse within the premises.	Environmental Manager or Coordinator
Sediment and erosion control measures	Construction activities involving ground disturbance.	Sediment and Erosion Control Plan has been developed, reviewed, approved and implemented.	Environment Manager (or delegate)

Item	Process Held	Acceptance Criteria	Approval Authority
Vegetation removal	Commencement of site clearing or vegetation removal.	Pre-clearing surveys and inspections for endangered and threatened flora and fauna species have been undertaken by qualified ecologists.	Environment Manager (or delegate)
Vegetation removal	Commencement of site clearing or vegetation removal.	Clearing limits have been verified against the project approval environmental assessment, limits have been set-out and vegetation to be retained has been delineated and or protected. Tree Report has been completed and submitted to the DPE.	Environment Manager (or delegate)
Vegetation removal	Commencement of site clearing or vegetation removal.	Trained ecologist to be present during the clearing of native vegetation or removal of potential fauna habitat.	Environment Manager (or delegate)
Construction Methodologies – direct delivery and subcontract works.	Construction process representing potential medium or high impact to the environment.	Construction methodology / EWMS / Job Safety and Environmental Analysis (JSEA) have been reviewed by the Site Environmental Management Representative and addresses the relevant requirements of the CEMP procedures.	Project Engineer
OOHW Applications – individual works scenarios	Works to be performed outside of approved Construction hours (Pre-Construction and during Construction)	OOHW Protocol and Application Form and Community Notification EPL 12208	ER Endorsement and Approval TfNSW Approval (if OOHW are occurring under EPL 12208) EPA (Information to be provided on request)
Use of local roads by heavy vehicles	Use of local roads by heavy vehicles	Preparation of Road Dilapidation Report	Construction Manager (or delegate)
Dangerous Goods	Transport of dangerous goods	Verification that transport vehicles meet the requirements.	Construction Manager (or delegate)
Dangerous Goods	Storage of dangerous goods	Verification that bunded storage is provided and that segregation and separation distances are maintained for the storage area.	Construction Manager (or delegate)
Controlled/ Hazardous Waste	Transport of Controlled / Hazardous waste from the site	Verification that the waste has been classified in accordance with the EPA guidelines, transport licensing in place and landfill can lawfully receive the waste. Section 143 notice or equivalent from waste receiver has been received.	Construction Manager (or delegate)
Spoil Transport	Spoil import and removal	Verification that the spoil has been classified and the disposal location can lawfully receive the waste. Section 143 notice or equivalent from waste receiver has been received.	Construction Manager (or delegate) Environmental Manager (or delegate)

Item	Process Held	Acceptance Criteria	Approval Authority
		Imported material has classification reports or appropriate testing to demonstrate that it meets any EPA exemptions or has been classified as VENM/ENM.	
Encounter of Unexpected Heritage Item	Commencement of works in the affected area	The Unexpected Finds Process as outlined in the HMP and Sydney Metro Unexpected Finds Procedure must be applied in the event of encountering unexpected/potential heritage items.	Environmental Manager (or delegate)
Ancillary Facilities	Establishment of new ancillary facilities not identified in the planning approval documents	Demonstration that the ancillary facility meets the requirements of CoA A16. Where facilities don't meet the requirements of CoA A16, complying with the requirements of CoA A17. Endorsement by the ER for minor ancillary facilities in accordance with CoA A18.	DPE (outside rail corridor) ER
Pre-Construction compliance report	Construction works	Pre-Construction compliance report to be completed in accordance with CoA A31 and submitted to the DPE at least one month prior to the commencement of Construction.	DPE
Construction Monitoring Programs	Construction Works	Endorsement of the programs by the ER and submission to the DPE for approval at least one month prior to the commencement Construction Relevant baseline data for the specific Construction activity has been collected.	ER DPE

3.14. Restoration of sites

On completion of the works, any areas disturbed by Construction activities (such as areas for site compounds, material storage, access and haul roads and the provision of Downer's Project accommodation) will be reinstated and restored in accordance with consultation with Sydney Metro, the community and stakeholders. As a minimum, reinstatement will include the following:

- Downer will clear and clean all working areas and accesses at project completion;
- At the completion of Construction all plant, temporary buildings or vehicles not required for the subsequent stage of Construction will be removed from the site;
- All land, including roadways, footpaths, loading facilities or other land having been occupied temporarily will be returned to their pre-existing condition or better; and
- Reinstatement of community spaces, infrastructure and services will occur as soon as possible after completion of Construction.

3.15. Records of environmental activities

3.15.1. Environmental records

Downer's Environmental Manager is responsible for maintaining all environmental management documents and records as current at the point of use. In accordance with the CEMF, records will be maintained onsite for the duration of works. Types of documents and records include:

- All environmental monitoring, inspection and compliance reports/records;
- Environmental monitoring data;
- Documentation as required by performance conditions, approvals, licences and legislation;
- Reports on environmental incidents, other environmental non-compliances or non-conformances and follow-up action;
- Results of internal and external audits;
- Minutes of CEMP and Construction environmental management system review meetings and evidence of any action taken;
- Modifications to site environmental documentation;
- Induction and training records;
- Procedures and protocols;
- Checklists, forms and templates;
- Correspondence with public authorities;
- Complaints and enquiries received, and follow-up action;
- Notifications received by regulators;
- Community engagement information;
- CEMP and Sub-plans;
- EWMS; and
- Additional documents and requirements as identified in the CEMF, CoA and REMMs.

Records will be retained by Downer for a period of no less than seven years and will be made available in a timely manner to Sydney Metro (or their representative) upon request and will be managed in accordance with Downer EMS.

3.15.2. Document control

The Principal Contractor, the ER, and Sydney Metro where relevant, will coordinate the preparation, review and distribution, as appropriate, of the environmental documents and records listed above. During the Project, the environmental documents and records will be stored at each of the main site compounds.

The Principal Contractor will implement a Project document control management system to control the flow of documents within and between the Principal Contractor, Sydney Metro, stakeholders and subcontractors.

The process will also ensure that documentation is:

- Developed, reviewed and approved prior to issue;
- Issued for use;
- Controlled and stored for the legally required timeframe;
- Removed from use when superseded or obsolete; and
- Archived.

A register and distribution list will identify the current revision of particular documents, records or data.

In accordance with Downer EMS, all project documents are generated, numbered, approved, revised, transmitted, and stored in accordance with the project's Document Control Plan.

The review of this document ensures the suitability, effectiveness, and adequacy of this document. This document is formally reviewed every 6 months (as a minimum) and whenever the plan, risk, and/ or activities change from the scope/ content.

The review is conducted by a review team comprising the Project Manager (or delegate) and the Environmental Advisor/ Project Environmental Manager (or Safety Manager) and considers performance against the requirements of this document with respect to incident trends and findings from internal and external audits.

The Project Manager (or delegate) ensures any changes to this document as a result of review/ change is communicated to personnel.

3.16. Management review

Downer will check the status and adequacy of the CEMP to ensure that it meets current requirements as well as relevant environmental standards.

The CEMP will be reviewed as and when required during the course of the contract when the following situations arise:

- Client (Sydney Metro) recommendations for changes;
- Changes to Downer's standard system;
- Opportunities for improvement or deficiencies in the project system are identified; and
- Following an audit of the system or the occurrence of significant incidents, non-conformances or non-compliances.

The routine management review will be undertaken at six monthly intervals.

In addition, Downer will ensure the continual review and improvement of the EMS. This will generally occur in response to:

- Issues raised during environmental surveillance and monitoring;
- Expanded scope of works;
- Environmental incidents; and/or

- Environmental non-conformances or non-compliances.

A formal review of the EMS by Downer's Senior Management Team will also occur on an annual basis, as a minimum. This review will generate actions for the continual improvement of the EMS and supporting management plans.

3.17. CEMP/Sub-plan revision and changes to the Project

3.17.1. CEMP revision

Continual improvement is achieved through regular measurement, evaluation, audit and review of the effectiveness of the CEMP, Project environmental outcomes and Downer's EMS. A review process ensures that environmental documentation is updated as appropriate for the specific works that are occurring on site. Reviews undertaken as described in Section 3.16 will provide specific opportunities to identify improvements in the environmental management system and/or this CEMP.

This CEMP, CEMP Sub-plans and Monitoring Programs will be updated as required:

- To consider changes to the environment or generally accepted environmental management practices, new risks to the environment, any hazardoussubstances, contamination or changes in law;
- In response to internal or external audits or six-monthly management plan reviews;
- Following reportable environmental incidents;
- Upon identification of new risks, including risks identified during risk register updates;
- When non-conformances or non-compliances are identified;
- Following environmental audits that identify matters that require attention;
- In response to Project change (including modifications);
- As part of a continuous improvement process; and
- Where requested or required by DPE or any other Authority.

Should the document review process identify any issues or items within the documents that are either redundant or in need of updating, it is the responsibility of Downer's Environmental Manager or Environmental Advisors to prepare the revised documents.

This CEMP, and subsequent revisions, must be authorised by Downer's Environmental Manager. The ER can approve minor changes to the CEMP, where the ER is satisfied that the amendment to the CEMP is necessary. Minor changes as described in the CoA A26(i) would typically include those that:

- Are administrative in nature (e.g. staff and agency/authority name changes);
- Do not noticeably increase the magnitude of impacts on the environment when considered individually or cumulatively;
- Are in response to audit findings or periodic reviews; and
- Do not compromise the ability of the Project to meet legislative requirements and are consistent with terms of the approval and does not include any modifications to the terms of Project approval.

Where the ER deems it necessary, the amended CEMP will be forwarded to relevant stakeholders for review and comment if required and forwarded to the Planning Secretary for approval. All updates to the CEMP are to be communicated to Sydney Metro prior to finalisation and/or update of document.

Revised versions of the CEMP or Sub-plans will be made available and distributed to relevant stakeholders through the processes described in Section 3.15.2. Changes will also be communicated through toolbox talks to existing onsite personnel and incorporated into environmental induction materials.

3.17.2. Changes to the Project

Refinements to the Project may result from detailed design refinements or changed circumstances throughout Construction. In these instances, Downer's Environmental Manager will undertake a review of the refinement to confirm that it is covered by the Approval Documents. It may be the case that a Consistency Assessment in consultation with Sydney Metro will need to be undertaken to determine if a Project modification may be required following design changes or changes in scope (refer to Section 2.4).

Should the Consistency Assessment determine that a Project modification may be required (i.e. the impacts are of a nature and scale that it is not considered consistent with the Project approval), a modification application under Section 5.25(2) of the EP&A Act 1979 as prepared and lodged by Sydney Metro to the Planning Secretary for determination.

If required, the CEMP and Sub-plans would be updated as required to incorporate any additional potential environmental impacts or mitigation or management measures that resulted from the proposed changes. Affected personnel will be made aware of changes before the relevant works commence through toolbox talks, daily pre-start meeting, HSE committees or forums arranged to specifically address changes.

4. Environmental management documentation

CEMP Sub-plans, Monitoring Programs and Procedures support the Project's CEMP and environmental management. These documents have been prepared to address the requirements of the CoA, REMM, CEMF and other measures identified in Section 1.2 and environment assessment documentation. The CEMP structure overview is shown in Figure 8 and key environmental management documents are discussed below.

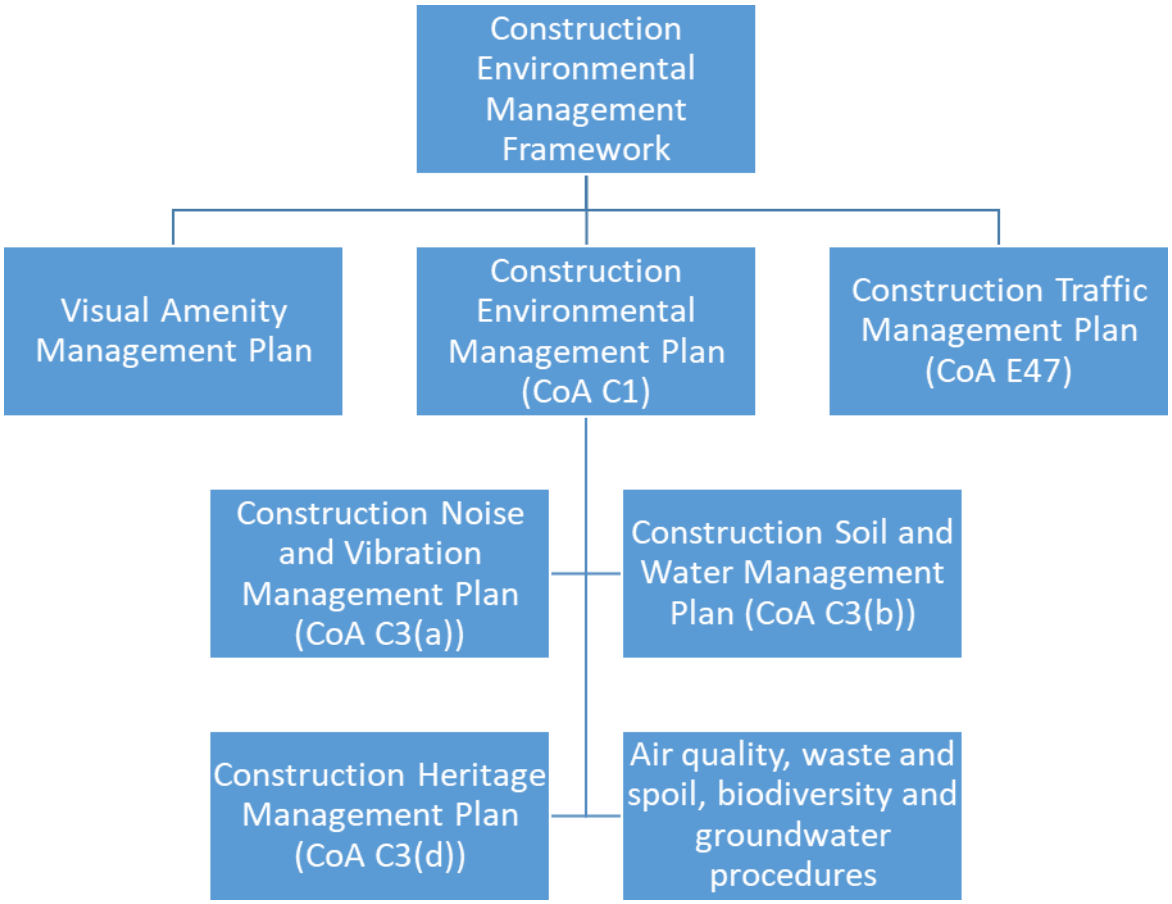

Figure 8 CEMP structure overview

4.1. Noise and vibration

A Noise and Vibration Management Plan (NVMP) has been developed to manage the noise and vibration risks during Construction of the Project. The NVMP is located in Appendix G of the CEMP and has been developed in accordance with CoA C3, C4, C5, C6 and C7.

For further Sub-plan specific CoA, REMM and other relevant requirements used to prepare the NVMP refer to Section 2 of the NVMP.

Furthermore, in accordance with the CoA C8(a) a Noise and Vibration Monitoring Program has been prepared and is included in Section 8 of the NVMP.

4.2. Soil and water

A Soil and Water Management Plan (SWMP) has been developed to manage soil and water quality risks during Construction of the Project. The SWMP is located in Appendix H of the CEMP and has been developed in accordance with CoA C3, C4, C5, C6 and C7.

For further Sub-plan specific CoA, REMM and other relevant requirements used to prepare the SWMP refer to Section 2.2 and Appendix A of the SWMP.

CoA C8(b) requires the preparation of a Water Quality Monitoring Program. Consistent with Section 3.3(b) of the CEMF, a Water Quality Monitoring Procedure has been prepared and is included in Section 6 of the SWMP.

4.3. Heritage

A Heritage Management Plan (HMP) has been developed to manage the risks from Construction of the Project. The HMP is located in Appendix I of the CEMP and has been developed in accordance with CoA C3, C4, C5, C6 and C7.

For further Sub-plan specific CoA, REMM and other relevant requirements used to prepare the HMP refer to Section 2.2 and Appendix A of the HMP.

4.4. Waste and spoil

CoA C3(c) required the preparation of a Waste and Spoil Management Plan. However, in accordance with the Sydney Metro City & Southwest - Sydenham to Bankstown Staging Report a Waste and Spoil Procedure has been prepared. Refer to Section 4.7 and Appendix E for further detail.

4.5. Visual Amenity

A Visual Amenity Management Plan (VAMP) will be prepared by the Principal Contractor to manage the visual amenity risks during Construction of the Project. The VAMP is a standalone document and has been developed in accordance with Section 3.4 of the CEMF.

4.6. Traffic

Construction Traffic Management Plan/s (CTMP/s) will be prepared by the Principal Contractor as per CoA E47. These are standalone documents and do not form part of the CEMP. The CTMP/s will be submitted to DPE for information following engagement with RMS and SCO.

4.7. Other aspects

Consistent with the Sydenham to Bankstown Staging Report and Sections 3.4 and 3.5 of the CEMF, procedures have been prepared for the following environmental aspects:

- Biodiversity;
- Groundwater;
- Air Quality; and
- Waste and Spoil.

These procedures are included in Appendix E.

4.8. Sustainability

A Sustainability Strategy for the Sydenham to Bankstown project has been prepared in accordance with CoA E43. The Sustainability Strategy is available on the Sydney Metro website https://www.sydneymetro.info/documents.

Appendix A: Compliance Matrix

Conditions of Approval compliance matrix

CoA	Condition requirements	Document reference
A16	Ancillary facilities that are not identified by description and location in the documents listed Condition A1 can only be established and used in each case if: a) they are located within the Construction boundary of the CSSI; and b) they are not located next to a sensitive receiver (including access roads) (unless landowners and occupiers have accepted in writing the carrying out of the relevant facility in the proposed location); and c) they have no impacts on heritage items (including areas of archaeological sensitivity), and threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.	Section 3.12.1
A17	Ancillary facilities that are not identified by description and location in the documents listed in Condition A1 and do not meet the requirements of Condition A16, can only be established and used with the approval of the Planning Secretary except where they are located within the rail corridor, in which case they may be endorsed by the ER. A review of environmental impacts must be submitted with the request for Planning Secretary's approval or ER's endorsement.	Section 3.12.1
A18	The use of an ancillary facility for Construction must not commence until the CEMP required by Condition C1, relevant CEMP Sub-plans required by Condition C3 and relevant Construction Monitoring Programs required by Condition C8 have been approved by the Planning Secretary.	Section 3.12.1
A19	Lunch sheds, office sheds, portable toilet facilities, and the like, that are not identified as an ancillary facility in the documents listed **Condition A1,** can be established where they satisfy the following criteria: a) are located within the Construction boundary; and b) have been assessed by the **ER** to have - i. minor amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and ii. minor environmental impact with respect to waste management and flooding, and iii. no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.	Section 3.12.1
A20	Boundary screening must be erected around all ancillary facilities that are adjacent to sensitive receivers for the duration of Construction of the CSSI unless otherwise agreed with relevant council(s), and affected residents, business operators or landowners.	Section 3.12.2
A21	Boundary screening required under Condition A20 of this approval must minimise visual, noise and air quality impacts on adjacent sensitive	Section 3.12.2

CoA	Condition requirements	Document reference
	receivers.	
A22	Work must not commence until an ER has been approved by the Planning Secretary and engaged by the Proponent.	Section 3.3
A23	The Planning Secretary's approval of an ER must be sought no later than one (1) month before the commencement of Work.	Section 3.3
A24	The proposed ER must be a suitably qualified and experienced person who was not involved in the preparation of the EIS, SPIR or Submissions Report and is independent from the design and Construction personnel for the CSSI and those involved in the delivery of it.	Section 3.3
A26	For the duration of the Work until the commencement of Operation, or as agreed with the Planning Secretary, the approved **ER** must: a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI; b) consider and inform the Planning Secretary on matters specified in the terms of this approval; c) consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community; d) review documents identified in **Conditions C1, C3** and **C8** and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: i. make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary), or ii. make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Secretary); e) regularly monitor the implementation of the documents listed in **Conditions C1, C3** and **C8** to ensure implementation is being carried out in accordance with the document and the terms of this approval; f) as may be requested by the Planning Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under **Condition A34** of this approval; g) as may be requested by the Planning Secretary, assist the Department in the resolution of community complaints; h) assess the impacts of minor ancillary facilities as required by **Condition A19** of this approval; **i)** consider any minor amendments to be made to the documents listed in **Conditions C1, C3** and **C8** and any document that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in **Conditions C1, C3** and **C8** or other documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; and j) prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report detailing the **ER's** actions and decisions on matters for which the ER was responsible in the preceding month. The k) Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the **ER's** engagement for the CSSI.	Section 3.3
A29	Before the commencement of Construction, a Compliance Monitoring and Reporting Program must be prepared, endorsed by the ER and submitted to the Planning Secretary for information.	Section 3.9 and 0

CoA	Condition requirements	Document reference
A30	Compliance reports of the CSSI must be carried out for the duration of Construction and for a minimum of one (1) year following commencement of Operation. The Department must be notified of the commencement dates of Construction and Operation of the CSSI in the pre-Construction and pre-Operational compliance reports (respectively).	Section 3.9 and 0
A31	The **Construction Compliance Report** must provide details of any review of, and minor amendments made to, the **CEMP** (which must be approved by the **ER),** resulting from Construction carried out during the reporting period.	Section 3.9 and 0
A32	The **Compliance Monitoring and Reporting Program** in the form required under **Condition A29** of this approval must be implemented for the duration of Construction and for a minimum of one (1) year following commencement of Operation, or for a longer period as determined by the Planning Secretary based on the outcomes of independent audits, **Environmental Representative Reports** and regular compliance reviews submitted through **Compliance Reports.** If staged Operation is proposed, or Operation is commenced of part of the CSSI, the **Compliance Monitoring and Reporting Program** must be implemented for the relevant period of each stage or part of the CSSI.	Section 3.9 and 0
A33	No later than one (1) month before the commencement of Construction an Independent Audit Program prepared in accordance with AS/NZS ISO 19011:2014 – Guidelines for Auditing Management Systems must be submitted to the Planning Secretary.	Section 3.9.3
A34	Independent audits of the CSSI must be carried out in accordance with: a) the Independent Audit Program submitted to the Planning Secretary under Condition A33 of this approval and Independent Audit Reports prepared.	Section 3.9.3
A35	The Proponent must: a) review and respond to each Independent Audit Report prepared under Condition A34 of this approval; and b) submit the response to the Planning Secretary within six (6) weeks of completing the audit.	Section 3.9.3
A36	The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and nature of the incident.	Section 3.10.3
A37	Subsequent notification must be given, and reports submitted in accordance with the requirements set out in **Appendix A**	Section 3.10.3
E2	In addition to the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1, all reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during the Construction and Operation of the CSSI.	Appendix E – Procedure 3: Air Quality
E3	Where impacts to threatened ecological communities or endangered species cannot be avoided, they must be offset in accordance with the requirements of the NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014) in agreement with OEH. *Note: the SPIR proposal does not require offsetting under the Framework for Biodiversity Assessment as it does not have any impacts to threatened ecological communities or threatened species.*	Appendix E – Procedure 1: Biodiversity
E4	The CSSI must be designed to retain as many trees as possible. Where trees are to be removed, the Proponent must provide a 2:1 ratio replacement of trees. Replacement trees must be planted within the project boundary or on public land up to 500 metres from the project boundary. Replacement tree plantings can be undertaken beyond 500 metres on public land within the local government areas to which the	Appendix E – Procedure 1:

CoA	Condition requirements	Document reference
	CSSI approval applies if requested by the relevant council(s) or where no more practicable land for planting can be found within and up to 500 metres from the CSSI boundary. The location of replacement tress must be determined in consultation with the relevant council(s).	Biodiversity
E5	The Proponent must commission an independent experienced and suitably qualified arborist, to prepare a comprehensive Tree Report(s) before removing any tress as detailed in the documents listed in Condition A1. The Tree Report may be prepared for the entire CSSI or separate reports may be prepared for individual areas where trees are required to be removed. The report(s) must identify the impacts of the CSSI on trees and vegetation within and adjacent to the Construction footprint. The report(s) must include: (a) assess compliance with the requirements of this approval; (b) a description of the conditions of the tree(s) and its amenity and visual value; (c) consideration of all options to avoid tree removal, including relocation of services, redesign or relocation of ancillary components (such as substations, fencing etc.) and reduction of standard offsets to underground services; and (d) measures to avoid the removal of trees or minimise damage to existing trees and ensure the health and stability of those trees to be protected. This includes details of any proposed canopy or root pruning, root protection zone, excavation, site controls on waste disposal, vehicular access, storage of materials and protection of public utilities. A copy of the report(s) must be submitted to the Planning Secretary before the removal or pruning of any trees, including those affected by site establishment Work. All recommendations of the report must be implemented by the Proponent, unless otherwise agreed by the Planning Secretary.	Appendix E – Procedure 1: Biodiversity
E6	Replacement trees are to have a minimum pot size of 75 litres except where the plantings are consistent with the pot sizes specified in a relevant council's plans / programs / strategies for vegetation management, street planting, or open space landscaping, or as agreed by the relevant council. In areas not subject to council plans / programs / strategies, pot sizes should be informed through consultation with the relevant council(s). *Note: For the purposes of Conditions E5 and E6, consultation with relevant council(s) encompasses consultation undertake with those councils on the Station Design and Precinct Plan required by Condition E56, and any agreements reached on replacement pot sizes during consultation.*	Appendix E – Procedure 1: Biodiversity
E54	The Proponent must construct and operate the CSSI with the objective of minimising light spillage to surrounding properties. All lighting associated with the Construction and Operation of the CSSI must be consistent with the requirements of *Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting* and relevant Australian Standards in the series *AS/NZ 1158 – Lighting for Roads and Public Spaces.*	Refer to VAMP Section 3.2.3
E73	Any items or infrastructure that are salvageable must be identified in the relevant CEMP Sub- plan (Condition C3). *Note: reuse of items may include signal boxes, indicators, ballast or other rail infrastructure. These items should be offered to Sydney Trains or reuse.*	Appendix E – Procedure 4: Waste and Spoil
E74	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the Protection of the Environment Operations Act 1997, under the Protection of the Environment Operations (Waste) Regulation 2014, and orders or exemptions made under the regulation.	Appendix E – Procedure 4: Waste and Spoil

CoA	Condition requirements	Document reference
E75	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste.	Appendix E – Procedure 4: Waste and Spoil
E76	All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	Appendix E – Procedure 4: Waste and Spoil

CEMF compliance matrix

Clause	Requirement	Document Reference
1.3	Transport for NSW (TfNSW) has developed an Environment and Sustainability Policy (Appendix A) for Sydney Metro Delivery Office (SMDO). Principal Contractors will be required to undertake their works in accordance with this policy. The policy reflects a commitment in the delivery of the project to: • Align with, and support, Transport for NSW (TfNSW) Environment & Sustainability Policy. • Optimise sustainability outcomes, transport service quality, and cost effectiveness. • Develop effective and appropriate responses to the challenges of climate change, carbon management, resource and waste management, land use integration, customer and community expectation, and heritage and biodiversity conservation. • Be environmentally responsible, by avoiding pollution, enhancing the natural environment and reducing the project ecological footprint, while complying with all applicable environmental laws, regulations and statutory obligations. • Be socially responsible by delivering a workforce legacy which benefits individuals, communities, the project and industry, and is achieved through collaboration and partnerships.	Section 1.3 Appendix D
2	The key environmental obligations to be addressed are contained within: • Legislative requirements. • Project approval documentation. • Conditions of Approval. • Environment Protection Licences. • Other permits, approval and licences. • Standards and guidelines.	Section 2

Clause	Requirement	Document Reference
2.1	Table 1.1 (of the CEMF) identifies key NSW environmental legislative requirements and their application to Sydney Metro C&SW construction works, current as at the date of this document. TfNSW and its Contractors should regularly review their legislative requirements.	Section 2
2.2	Sydney Metro Northwest is classified as Critical State Significant Infrastructure and was approved under the following in accordance with Section 115W of the Environmental Protection and Assessment Act 1997: • Staged State Infrastructure Approval (1 October 2011, modified on 25 September 2012) • Stage 1 – Major Civil Construction Works (25 September 2012, modified on 18 April 2013) • Stage 2 – Stations, Rail Infrastructure and Systems (8 May 2013, modified on 20 May 2014). Some components of Sydney Metro Northwest (such as the conversion of the Epping to Chatswood component of the project) have also been approved under Part 5 of the Environmental Protection and Assessment Act. in which case TfNSW is the consent authority. Sydney Metro City and Southwest is also classified as Critical State Significant Infrastructure and requires approval from a consent authority under the requirements of the Environmental Protection and Assessment Act 1997 (Section 115W). Two separate approvals will be sought: • Sydney Metro City and Southwest – Chatswood to Sydenham • Sydney Metro City and Southwest - Sydenham to Bankstown The requirements of the approval are required to be complied with by TfNSW. Responsibility for implementing mitigation measures and conditions of approval will be allocated between TfNSW and Principal Contractors as appropriate. Typically TfNSW will produce a Staging Report which sets out the applicability and allocation of approval requirements within the project's program of works.	Section 2 Appendix A
2.3	Sydney Metro projects often meet the definition of a number of scheduled activities under Schedule 1 of the Protection of the Environmental Operation Act 1997 (POEO Act) and as such our contractors may be required to obtain an Environment Protection Licence (EPL) or work under the existing EPL held by Sydney Trains. Where required, Sydney Metro Principal Contractors will: a. Apply for and be granted an EPL from the EPA. b. Hold an EPL which covers their scope of works as necessary under the POEO Act. c. Undertake their scope of works in accordance with the conditions of the applicable EPLs as issued by the EPA. d. Work under the existing Sydney Trains EPL.	Section 2.6
2.4	Numerous environmental publications, standards, codes of practice and guidelines are relevant to TfNSW construction and are referenced throughout this Construction Environmental Management Framework. A summary of these applicable standards and guidelines is provided below: • ISO14001 Environmental Management System – Requirements with Guidelines for Use	Section 2.5

Clause	Requirement	Document Reference
	• Interim Construction Noise Guidelines (Department of Environment and Climate Change, 2009) • Managing Urban Stormwater: Soil and Construction (Landcom, 2008) AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting • Waste Classification Guidelines (Department of Environment, Climate Change and Water, 2008) • AS 1742.3 Manual of uniform traffic control devices Part 3: Traffic control for works on roads • RMS Traffic Control at Worksites Manual • Australian and New Zealand Guidelines for Fresh and Marine Water Quality	
3.1(a)	Principal Contractors are required to have a corporate Environmental Management System certified under AS/NZS ISO 14001:2004 and to have transitioned this accreditation into AS/NZS ISO 14001:2015 by September 2018.	This plan
3.1(b)	Principal Contractors are required to develop a project based Environment and Sustainability Management System (E&SMS). The E&SMS will: (i) Be consistent with the Principal Contractors corporate Environmental Management System and AS/NZS ISO 14001:2004 or 2015; (ii) Be supported by a process for identifying and responding to changing legislative or other requirements; (iii) Include processes for assessing design or construction methodology changes for consistency against the planning approvals; (iv) Include processes for tracking and reporting performance against sustainability and compliance targets; (v) Include a procedure for the identification and management of project specific environmental risks and appropriate control measures; and (vi) Be consistent with the Sydney Metro C&SW Sustainability Strategy and Sydney Metro Environment and Sustainability Policy	This plan
3.1(c)	All sub-contractors engaged by the Principal Contractor will be required to work under the Principal Contractor's E&SMS.	Section 3.4
3.1(d)	The relationship between key documents within the Sydney Metro Environment and Sustainability Management System and the Principal Contractor's Environment and Sustainability Management System is shown in Figure 2 (of the CEMF).	This Plan
3.1(e)	The Principal Contractors Sustainability Plan and its Sub-plans will capture governance and design requirements as well as social sustainability initiatives as required by the Sydney Metro Sustainability Strategies.	Refer to Sustainability Management Plan
3.1(f)	These plans vary in scope across different delivery packages.	Noted

Clause	Requirement	Document Reference
3.4(a)	Subject to Section 3.3(b) and Section 3.2(b) the Principal Contractor will prepare issue-specific environmental Sub-plans to the CEMP and SMP which address each of the relevant environmental impacts at a particular site or stage of the project. Issue specific Sub-plans will include: (i) Spoil management; (ii) Groundwater management; (iii) Traffic and transport; (iv) Noise and vibration management; (v) Heritage management; (vi) Flora and fauna management; (vii) Visual amenity management; (viii) Carbon and energy management; (ix) Materials management; (x) Soil and water management; (xi) Air quality management; and (xii) Waste management and recycling.	Refer to Section 1.2 and Staging Report
3.5(a)	The Principal Contractor will prepare and implement activity specific environmental procedures. These procedures should support environmental management Sub-plans, but may substitute for Sub-plans in agreement with TfNSW if a reasonable risk based justification can be made and the Sub-plans in agreement with TfNSW if a reasonable risk based justification can be made and the sub plan is not a requirement of any approval.	Appendix E
3.5(b)	The procedures will include; (i) A breakdown of the work tasks relevant to the specific activity and indicate responsibility for each task; (ii) Potential impacts associated with each task; (iii) A risk rating for each of the identified potential impacts; (iv) Mitigation measures relevant to each of the work tasks; and (v) Responsibility to ensure the implementation of the mitigation measures	Appendix E
3.5(c)	The Principal Contractor will prepare and implement site based progressive Environmental Control Maps (ECM's) which as a minimum: (i) Is a progressive document depicting a current representation of the site;	Section 3.2.3

Clause	Requirement	Document Reference
	(ii) Indicates which environmental procedures, environmental approvals, or licences are applicable; (iii) Illustrates the site showing significant structures, work areas and boundaries; (iv) Illustrates environmental control measures and environmentally sensitive receivers; (v) Is endorsed by the Principal Contractors Environmental Manager or delegate; and (vi) Relevant workers will be trained in the requirements of and will sign off the procedures prior to commencing works on the specific site and / or activity.	
3.6(a)	Where the requirement for an additional environmental assessment is identified, this will be undertaken prior to undertaking any physical works. The environmental assessment will include: (i) A description of the existing surrounding environment; (ii) Details of the ancillary works and construction activities required to be carried out including the hours of works; (iii) An assessment of the environmental impacts of the works, including, but not necessarily limited to, traffic, noise and vibration, air quality, soil and water, ecology and heritage; (iv) Details of mitigation measures and monitoring specific to the works that would be implemented to minimise environmental impacts; and (v) Identification of the timing for completion of the construction works, and how the sites would be reinstated (including any necessary rehabilitation).	Section 2.4
3.7(a)	Prior to the commencement of construction the Principal Contractors will offer Pre-construction Building Condition Surveys, in writing, to the owners of buildings where there is a potential for construction activities to cause cosmetic or structural damage. If accepted, the Principal Contractor will produce a comprehensive written and photographic condition report produced by an appropriate professional prior to relevant works commencing.	Refer to Construction Noise and Vibration Management Plan.
3.7 (b)	Prior to the commencement of construction the Principal Contractor will prepare a Road Dilapidation Report for all local public roads proposed to be used by heavy vehicles.	Refer to Construction Traffic Management Plan
3.8(a)	Principal Contractors will identify hold points, beyond which approval is required to proceed with a certain activity. Example activities include vegetation removal and water discharge. Hold points will be documented in relevant CEMPs.	Section 3.13
3.8(b)	Table 1.4 (of the CEMF) provides the structure for the register of hold points as well as a preliminary list of hold points which will be implemented.	Section 3.13
3.9(a)	Principal Contractors will be responsible for determining the training needs of their personnel. As a minimum this will include site induction, regular toolbox talks and topic specific environmental training as follows: i. The site induction will be provided to all site personnel and will include, as a minimum: • Training purpose, objectives and key issues; • Contractor's environmental policy and key performance indicators;	Section 3.5

Clause	Requirement	Document Reference
	• Due diligence, duty of care and responsibilities; • Relevant conditions of any environmental licence and/or the relevant conditions of approval; • Site specific issues and controls including those described in the environmental procedures; • Reporting procedure for environmental hazards and incidents; • Communication protocols. ii. Toolbox talks will be held on a regular basis in order to provide a project or site wide update, including any key or recurring environmental issues; and iii. Topic specific environmental training, e.g. erosion and sediment control training will be undertaken for relevant site personnel as determined by the Principal Contractor	
3.9(b)	Principal Contractors will conduct a Training Needs Analysis which: i. Identifies that all staff are to receive an environmental induction and undertake environmental incident management training ii. Identifies the competency requirements of staff that hold environmental roles and responsibilities documented within the Construction Environmental Management Plan and Sub-plans iii. Identifies appropriate training courses/events and the frequency of training to achieve and/or maintain these competency requirements iv. Implements and documents as part of the CEMP a training schedule that plans attendance at environmental training events, provides mechanisms to notify staff of their training requirements, and identifies staff who do not attend scheduled training events or who have overdue training requirements	Section 3.5
3.10(a)	Principal Contractors will develop and implement a Pollution Incident Response Management Plan, in accordance with the requirements of the POEO Act. Contractors' emergency and incident response procedures will also be consistent with any relevant SMDO procedures and will include: i. Categories for environmental emergencies and incidents ii. Notification protocols for each category of environmental emergency or incident, including notification of TfNSW and notification to owners / occupiers in the vicinity of the incident. This is to include relevant contact details iii. Identification of personnel who have the authority to take immediate action to shut down any activity, or to affect any environmental control measure (including as directed by an authorised officer of the EPA) iv. A process for undertaking appropriate levels of investigation for all incidents and the identification, implementation and assessment of corrective and preventative actions; and v. Notification protocols of incidents to the EPA, DPE or OEH that are made by the Contractor or TfNSW.	Sections 0
3.10(b)	The Contractor will make all personnel aware of the plan and their responsibilities.	Section 3.3
3.11(a)	Independent Environmental Representatives	Section 3.3

Clause	Requirement	Document Reference
	a. TfNSW will engage Independent Environmental Representatives (ERs) to undertake the following, along with any additional roles as required: i. Review, provide comment on and endorse (where required) any relevant environmental documentation to verify it is prepared in accordance with relevant environmental legislation, planning approval conditions, relevant standards and this CEMF. ii. Monitor and report on the implementation and performance of the above mentioned documentation and other relevant documentation. iii. Provide independent guidance and advice to TfNSW and the Contractors in relation to environmental compliance issues and the interpretation of planning approval conditions. iv. Be the principal point of advice for the DPE in relation to all questions and complaints concerning the environmental performance of the project. v. Ensure that environmental auditing is undertaken in accordance with all relevant project requirements. vi. Recommend reasonable steps, including 'stop works', to be taken to avoid or minimise adverse environmental impacts.	
3.12(a)	In relation to Roles and Responsibilities the CEMP will: i. Describe the relationship between the Principal Contractor, TfNSW, key regulatory stakeholders, the independent environmental representative and the independent certifier ii. For each role that has environmental accountabilities or responsibilities, including key personnel, provide a tabulated description of the authority and roles of key personnel, lines of responsibility and communication, minimum skill level requirements and their interface with the overall project organisation structure iii. Provide details of each specialist environment, sustainability or planning consultant who is employed by the Principal Contractor including the scope of their work iv. Provide an overview of the role and responsibilities of the Independent Environmental Representative, the Independent Certifier and other regulatory stakeholders.	Section 3.3
3.12(b)	All sub-contractors engaged by the Principal Contractor will be required to operate within the EMS documentation of that Principal Contractor	Section 3.4
3.13(a)	Issue specific environmental monitoring will be undertaken as required or as additionally required by approval, permit or licence conditions	Refer to relevant Sub-plans
3.13(b)	The results of any monitoring undertaken as a requirement of the EPL will be published on the Principal Contractor's, or a project specific, website within 14 days of obtaining the results	Section 2.6
3.13(c)	Environmental inspections will include: i. Surveillance of environmental mitigation measures by the Site Foreman.	Section 3.9.1

Clause	Requirement	Document Reference
	ii. Periodic inspections by the Principal Contractor's Environmental Manager (or delegate) to verify the adequacy of all environmental mitigation measures. This will be documented in a formal inspection record.	
3.13(d)	Regular site inspections by the ERs and TfNSW representatives at a frequency to be agreed with the Principal Contractor	Section 3.9.1
3.13(e)	Principal Contractors will be required to undertake internal environmental audits. Internal audits will include: i. Compliance with approval, permit and licence conditions. ii. Compliance with the E&SMS, CEMP, SMP, Sub-plans and procedures. iii. Community consultation and complaint response. iv. Environmental training records. v. Environmental monitoring and inspection results	Section 3.9.3
3.13(f)	TfNSW (or an independent environmental auditor) will also undertake periodic audits of the Principal Contractor's E&SMS and compliance with the environmental aspects of contract documentation, including this Construction Environmental Management Framework.	Section 3.9.3
3.14(a)	Environmental Non-compliances Principal Contractors will document and detail any non-compliances arising out of the above monitoring, inspections and audits. TfNSW will be made aware of all non-compliances in a timely manner	Section 0
3.14(b)	Principal Contractors will develop and implement corrective actions to rectify the non-compliances and preventative actions in order to prevent the re-occurrence of the non-compliance. Contractors will also maintain a register non compliances, corrective actions and preventative actions	Section 0
3.14(c)	TfNSW or the Environmental Representative may raise non-compliances against environmental requirements.	Noted
3.15(a)	Principal Contractors will maintain appropriate records of the following: i. Site inspections, audits, monitoring, reviews or remedial actions. ii. Documentation as required by performance conditions, approvals, licences and legislation. iii. Modifications to site environmental documentation (e.g. CEMP, Sub-plans and procedures). iv. Other records as required by this Construction Environmental Management Framework	Section 3.15
3.15(b)	Records will be retained onsite for the duration of works	Section 3.15
3.15(c)	Additionally records will be retained by the Principal Contractor for a period of no less than 7 years in total. Records will be made available in a timely manner to TfNSW (or their representative) upon request	Section 3.15

Clause	Requirement	Document Reference
3.15(d)	Compliance reports detailing the outcome of any environmental surveillance activity including internal and external audits (refer to Section 3.13) will be produced by the Principal Contractors Environmental Manager or delegate. These reports will be submitted to TfNSW at an agreed frequency	Section 3.9.4
3.16(a)	Principal Contractors will ensure the continual review and improvement of the E&SMS. This will generally occur in response to: i. Issues raised during environmental surveillance and monitoring ii. Expanded scope of works iii. Environmental incidents iv. Environmental non-conformances.	Section 3.16 and 3.17
3.16(b)	A formal review of the E&SMS by the Principal Contractor's Senior Management Team will also occur on an annual basis, as a minimum. This review will generate actions for the continual improvement of the E&SMS and supporting management plans.	Section 3.16
5.1(a)	Standard working hours are between 7am – 6pm on weekdays and 8am – 1pm on Saturdays.	Section 3.6 Noise and Vibration Management Plan
5.1(b)	Works which can be undertaken outside of standard construction hours without any further approval include: i. Those which have been described in respective environmental assessments as being required to take place 24/7. For example, tunnelling and underground excavations and supporting activities will be required 24/7 ii. Works which are determined to comply with the relevant Noise Management Level at sensitive receivers iii. The delivery of materials outside of approved hours as required by the Police or other authorities (including RMS) for safety reasons iv. Where it is required to avoid the loss of lives, property and / or to prevent environmental harm in an emergency v. Where written agreement is reached with all affected receivers.	Section 3.6 Noise and Vibration Management Plan
5.1(c)	Principal Contractors may apply for EPA approval to undertake works outside of normal working hours under their respective Environment Protection Licences	Noise and Vibration Management Plan
5.2(a)	Principal Contractors will consider the following in the layout of construction sites: i. The location of noise intensive works and 24 hour activities in relation to noise sensitive receivers ii. The location of site access and egress points in relation to noise and light sensitive receivers, especially for sites proposed to be utilised 24 hours per day iii. The use of site buildings to shield noisy activities from receivers iv. The use of noise barriers and / or acoustic sheds where feasible and reasonable for sites proposed to be regularly used outside of daytime hours	Noise and Vibration Management Plan

Clause	Requirement	Document Reference
	v. Aim to minimise the requirement for reversing, especially of heavy vehicles.	
5.3(a)	Mitigation measures for reinstatement will be produced in consultation with TfNSW, the community and stakeholders.	Section 3.14
5.3(b)	Mitigation measures required for reinstatement will be incorporated into the CEMP and will include as a minimum: i. Principal Contractors will clear and clean all working areas and accesses at project completion ii. At the completion of construction all plant, temporary buildings or vehicles not required for the subsequent stage of construction will be removed from the site iii. All land, including roadways, footpaths, loading facilities or other land having been occupied temporarily will be returned to their pre-existing condition or better iv. Reinstatement of community spaces, infrastructure and services will occur as soon as possible after completion of construction.	Section 21
6.1 (a)	The following spoil management objectives will apply to the construction of the project: i. Minimise spoil generation where possible; ii. The project will mandate 100% reuse or recycling (on or off-site) of usable spoil; iii. Spoil will be managed with consideration to minimising adverse traffic and transport related issues; iv. Spoil will be managed to avoid contamination of land or water; v. Spoil will be managed with consideration of the impacts on residents and other sensitive receivers; and vi. Site contamination will be effectively managed to limit the potential risk to human health and the environment.	Appendix E – Procedure 4: Waste and Spoil Appendix H – Soil and Water Management Plan
6.2 (a)	Principal Contractors will develop and implement a Spoil Management Plan for their scope of works. The Spoil Management Plan will include as a minimum: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
6.3 (a)	Examples of spoil mitigation measures include: i. Implementing the spoil re-use hierarchy; ii. Handling spoil to minimise potential for air and water pollution; and iii. Minimise traffic impacts associated with spoil removal.	Appendix E – Procedure 4: Waste and Spoil
7.1 (a)	The following groundwater management objectives will apply to construction: i. Reduce the potential for drawdown of surrounding groundwater resources; ii. Prevent the pollution of groundwater through appropriate controls; and iii. Reduce the potential impacts of groundwater dependent ecosystems.	Appendix E – Procedure 2: Groundwater
7.2 (a)	The following content may be provided within other sub plans such as the Soil and Water Management Plan and the Flora and Fauna Management Plan	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.

Clause	Requirement	Document Reference
7.2 (b)	Principal Contractor's will develop and implement a Groundwater Management Plan for their scope of works. The Groundwater Management Plan include as a minimum: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
7.3 (a)	Examples of groundwater mitigation measures include: i. Implementing all feasible and reasonable mitigation measures to limit groundwater inflows to stations and crossovers; and ii. Undertaking groundwater monitoring during construction (levels and quality) in areas identified as 'likely' and 'potential groundwater dependent ecosystems.	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
11.1 (a)	The following flora and fauna objectives will apply to construction: i. Minimise impacts on flora and fauna; ii. Design waterway modifications and crossings to incorporate best practice principles; iii. Retain and enhance existing flora and fauna habitat wherever possible; and iv. Appropriately manage the spread of weeds and plant pathogens.	Appendix E – Procedure 1: Biodiversity 11.1(a) ii. Is not relevant to this Project as no waterway modifications or crossings are proposed.
11.2 (a)	Principal Contractor's will develop and implement a Flora and Fauna Management Plan which will include as a minimum: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
11.2 (b)	Principal Contractors would undertake the following ecological monitoring as a minimum: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
11.2 (c)	The Principal Contractor's regular inspections will include a check on the ecological mitigation measures and project boundary fencing.	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
11.2 (d)	The following compliance records would be kept by the Principal Contractor: i. Records of pre-clearing inspections undertaken; ii. Records of the release of the pre-clearing hold point; and iii. Records of ecological inspections undertaken.	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
11.3 (a)	Examples of flora and fauna mitigation measures include: i. Areas to be retained and adjacent habitat areas will be fenced off prior to works to prevent damage or accidental over clearing; ii. Clearing will follow a two-stage process as follows: - Non-habitat trees will be cleared first after sign-off of the pre-clearing inspection; and	Appendix E – Procedure 1: Biodiversity

Clause	Requirement	Document Reference
	- Habitat trees will be cleared no sooner than 48 hours after non-habitat trees have been cleared. A suitably qualified ecologist will be present on site during the clearing of habitat trees. Felled habitat trees will be left on the ground for 24 hours or inspected by the ecologist prior to further processing. iii. Weed management is to be undertaken in areas affected by construction prior to any clearing works in accordance with the Noxious Weeds Act 1993.	
16.1 (a)	The following air quality management objectives will apply to construction: i. Minimise gaseous and particulate pollutant emissions from construction activities as far as feasible and reasonable; and ii. Identify and control potential dust and air pollutant sources.	Appendix E – Procedure 3: Air Quality
16.2 (a)	Principal Contractors will develop and implement an Air Quality Management Plan which will include, as a minimum: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
16.2 (b)	Air quality and dust monitoring will involve the following as a minimum: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
16.2 (c)	The following compliance records will be kept by the Principal Contractor: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
16.3 (a)	Examples of air quality mitigation measures include: i. Plant and equipment will be serviced and maintained in good working order to reduce unnecessary emissions from exhaust fumes; ii. Water suppression will be used for active earthwork areas, stockpiles, unsurfaced haul roads and loads of soil being transported to reduce wind-blown dust emissions; iii. Wheel-wash facilities or rumble grids will be provided and used near the site exit points, as appropriate; and iv. Dust extraction and filtration systems will be installed for tunnel excavation works and deep excavation with limited surface exposure.	Appendix E – Procedure 3: Air Quality 16.3 (a) iv. Is not relevant to this Project as no tunnel excavation works, or deep excavations are proposed
17.1 (a)	The following waste objectives will apply to construction: i. Minimise waste throughout the project life cycle; and ii. Waste management strategies will be implemented in accordance with the *Waste Avoidance and Resource Recovery Act 2001* management hierarchy as follows: - Avoidance of unnecessary resource consumption; - Resource recovery (including reuse, reprocessing, recycling and energy recovery); and - Disposal.	Appendix E – Procedure 4: Waste and Spoil

Clause	Requirement	Document Reference
17.1 (b)	Targets for the recovery, recycling or reuse of construction waste, and beneficial reuse of spoil will be provided by the Principal Contractor.	Appendix E – Procedure 4: Waste and Spoil
17.2 (a)	Principal Contractors will develop and implement a Waste Management and Recycling Plan which will include as a minimum: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
17.2 (b)	Principal Contractors will undertake the following waste monitoring as a minimum: […]	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
17.2 (c)	Principal Contractors will report all necessary waste and purchasing information to TfNSW as required for TfNSW to fulfil their WRAPP reporting requirements.	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
17.2 (d)	Compliance records will be retained by the Principal Contractors in relation to waste management including records of inspections and waste dockets for all waste removed from the site.	As outlined in the Sydenham to Bankstown Staging Report (rev 4) this is not applicable to the Project.
17.3 (a)	Examples of waste management and recycling mitigation measures include: i. All waste materials removed from the sites will be directed to an appropriately licensed waste management facility; ii. The use of raw materials (noise hoarding, site fencing, etc...) will be reused or shared, between sites and between construction contractors where feasible and reasonable; and iii. Recyclable wastes, including paper at site offices, will be stored separately from other wastes.	Appendix E – Procedure 4: Waste and Spoil

REMM No.	REMM Requirement	Timing	Document Reference
LV4	The management of trees during detailed design and construction planning would be guided by the project's Tree Management Strategy, which would be developed in consultation with councils and include consideration of relevant local plans and strategies. Where removal cannot be avoided, trees would be replaced in accordance with the Tree Management Strategy, including replacement of removed trees in a two for one ratio. Opportunities to retain and protect existing trees would be defined during detailed design and construction planning, in accordance with the project's Tree Management Strategy. The design would aim to reduce tree removal to the extent practicable, particularly where they contribute to screening vegetation or landscape character.	Design/pre-construction	Appendix E – Procedure 1: Biodiversity
LV12	Trees to be retained would be protected prior to the commencement of construction in accordance with AS4970-2009 Protection of trees on development sites and the project's Tree Management Strategy. Any tree pruning would be undertaken in accordance with the project's Tree Management Strategy, guided by a tree report prepared by a qualified arborist.	Construction	Appendix E – Procedure 1: Biodiversity
B1	Detailed design and construction planning would avoid direct impacts to vegetation mapped as threatened ecological communities or native plant community types, specifically Downy Wattle Turpentine - Grey Ironbark open forest on shale, Degraded Turpentine - Grey Ironbark open forest on shale and Broad-leaved Ironbark – Grey Box.	Design/pre-construction	Appendix E – Procedure 1: Biodiversity
B2	Pre-clearing surveys and inspections for endangered and threatened flora and fauna species would be undertaken by qualified ecologists prior to any clearing occurring. The surveys and inspections, and any subsequent relocation of species, would be undertaken in accordance with the measures provided in the biodiversity assessment report.	Design/pre-construction	Appendix E – Procedure 1: Biodiversity
B3	Areas of biodiversity value outside the project area would be marked on plans, and fenced or signposted where practicable, to prevent unnecessary disturbance.	Construction	Appendix E – Procedure 1: Biodiversity

REMM No.	REMM Requirement	Timing	Document Reference
B4	Impacts to Downy Wattle Turpentine - Grey Ironbark open forest on shale, Degraded Turpentine - Grey Ironbark open forest on shale and Broad-leaved Ironbark – Grey Box would be avoided. The locations of these species and communities would be marked on plans, fenced on site, and avoided.	Construction	Appendix E – Procedure 1: Biodiversity
B5	Equipment storage and stockpiling would be restricted to identified compound sites and already cleared land.	Construction	Appendix E – Procedure 1: Biodiversity
B6	A trained ecologist would be present during the clearing of native vegetation or removal of potential fauna habitat to avoid impacts on resident fauna and to salvage habitat resources as far as is practicable.	Construction	Appendix E – Procedure 1: Biodiversity
B7	Priority weeds would be managed in accordance with the Biosecurity Act 2015. Weeds of national environmental significance would be managed in accordance with the Weeds of National Significance Weed Management Guide.	Construction	Appendix E – Procedure 1: Biodiversity

Appendix B: Legal and Other Requirements

Legal requirements

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
Commonwealth requirements		
Environment Protection and Biodiversity Conservation Act, 1999	National environment law that provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, defined in the Act as matters of national environmental significance.	**No Relevance** The Project would not impact on any matters of national environmental significance or Commonwealth land
National Greenhouse and Energy Reporting Act 2007	Corporations emitting more than 50kT of carbon dioxide equivalent units are required to register and report their Scope 1 and Scope 2 emissions for all Facilities in which they have Operational Control. Facilities emitting more than 25kT of carbon dioxide equivalent units must register and report Scope 1 and Scope 2 emissions.	**High Relevance** Where the Principal Contractor has Operational Control, the Scope 1 and Scope 2 emissions associated with the project must be reported. This includes the collation and reporting of subcontractors site emissions.
Ozone Protection Act 1989	This Act provides for a system of controls and to regulate and prohibit the manufacture, sale, distribution, use, emission, re-cycling & disposal of stratospheric ozone depleting substances and articles that contain these substances. The impact is that appropriately qualified people in accordance with this Act must undertake all servicing and maintenance of this type of equipment.	**Low Relevance** The relevance of this Act will relate to the use of refrigerators and air conditioning units in site buildings and vehicles which still contain CFCs. Such items are unlikely to be found on site.
NSW requirements		
Biodiversity Conservation Act 2016	The *Biodiversity Conservation Act 2016* provides provision for listing of species and ecological communities in NSW, protection of animals and plants, private land conservation agreements, the biodiversity offsetting scheme, Biodiversity Assessment under the EP&A Act 1979, biodiversity certification of land, public consultation on biodiversity matters, the functions of the Biodiversity Conservation Trust, regulatory compliance mechanisms, investigative powers and criminal proceedings under the Act.	**Medium Relevance** SSI projects are exempt for regulatory compliance mechanisms set out under Part 11 of the *Biodiversity Conservation Act*. Species listed within the act are recognised and are to be protected.
Biosecurity Act 2015	This Act relates to diseases and pests that may cause harm to human, animal or plant health or the environment, and for related purposes. Declared weeds	**Low Relevance**

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
Biosecurity Regulation 2017	are listed in Schedule 8 of the Biosecurity Regulation 2017. This act repeals the *Noxious Weeds Act 1993*.	The Act relates to the management of vegetation during and removal activities and the duty to notify should certain pests and diseases be identified. No such species have been identified on the Project's works sites.
Contaminated Land Management Act 1997	This Act provides for a process to investigate and remediate land that has been contaminated and presents a significant risk of harm to human health. Section 60 of the Act is a "Duty to Report Contamination". This duty applies to owners of land and persons who become aware their activities have contaminated the land.	**Medium Relevance** The relevance of this Act to the Principal Contractor will be in the event suspected or potentially contaminated ground is found during Construction activities.
Dangerous Goods (Road and Rail Transport) Act 2008	The purpose of this Act is to regulate the transport of Dangerous Goods by road and rail in order to promote public safety and protect property and the environment. The transport of Dangerous Goods is required to be appropriately licensed (both vehicle and driver). Depending on the quantities being transported, the Act outlines specific requirements for including appropriate placards on the transport vehicle, emergency procedures, Personal Protective Equipment, manifest documentation and fire extinguishers.	**High Relevance** The relevance of the Act is in respect to the transport of dangerous good to & from the site. The project will require the use of a variety of dangerous goods. The Principal Contractor will need to review and ensure Dangerous Goods requirements are addressed where transported by its vehicles, plant and equipment.
Environmentally Hazardous Chemicals Act 1985	This Act prohibits the manufacturing, processing, keeping, distributing, conveying, using, selling or disposing of an environmental hazardous chemical or waste (prescribed activity) except under the provisions of a chemical control or a licence. The EPA is required to prepare inventories of environmentally hazardous chemicals and declared chemical wastes.	**Low Relevance** It is not anticipated any environmentally hazardous chemicals or declared chemical waste will be used or stored on site. The Act therefore has little relevance to the sites other than being aware of the existence of registers of declared chemical wastes and environmentally hazardous chemicals.
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals in NSW.	**High Relevance** The Project has been declared Critical State Significant Infrastructure (CSSI) by virtue of Schedule 5, clause 4 of *State Environmental Planning Policy (State and Regional Development) 2011*. The development consent conditions and obligations are incorporated into the CEMP.
Fisheries Management Act 1994	This Act is applicable to all waters within the state including private and public waters and all permanent and intermittent waters. The Act is most relevant in respect to maintaining water quality and ensuring no polluted water from site	**Low Relevance** Along with the POEO Act water discharging from the site must not pollute the adjacent streams or watercourses. Projects

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
	works enters streams, creeks and waterways. In addition, this Act also has relevance for the removal of marine vegetation.	assessed under Division 5.2 of the EP&A Act are exempt from permits required under sections 201, 205 or 219.
Heritage Act 1977	This Act provides for the preservation and conservation of heritage items such as building, works, relic, places of historic interest, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance. Under this Act a relic means any deposit, object or material evidence which is 50 or more years old and relates to the settlement of the area (not being an aboriginal settlement). It is an offence under this Act to wilfully and knowingly damage or destroy items of heritage value. Do not demolish damage, move or develop around any place, building, work, relic, moveable object, precinct, or land that is the subject of an interim heritage order or listing on the State Heritage Register or heritage listing in a Local Environmental Plan without an approval from the Heritage Council (NSW) or local council.	**Low Relevance** Works will not occur within a State Heritage Register item. Regardless, projects assessed under Division 5.2 of the EP&A Act are exempt from approvals required under Part 4 and permits required under section 139 of the *Heritage Act*.
National Parks and Wildlife Act 1974	The relevance of this Act is firstly in respect to the protection and preservation of Aboriginal artefacts. Discovery of material on site suspected as being of Aboriginal origin must be reported and protected pending assessment and direction by the Client's Representative. Secondly it is an offence under Part 8A of this Act to pick or harm threatened species.	**Low Relevance** No identified Aboriginal artefacts have been identified within the Project's Construction area. Projects assessed under Division 5.2 of the EP&A Act are exempt from obtaining an Aboriginal Heritage Impact Permit required under section 90.
Pesticides Act 1999 ***Pesticides Regulation 1995***	This Act and Regulation establish a legislative framework to regulate the use of pesticides. They have the objective to promote the protection of human health, the environment, property and trade in relation to pesticides. It is an offence under this Act and Regulation to wilfully or negligently misuse pesticides.	**Low Relevance** It is not envisaged that pesticides will be used on the project by the Principal Contractor.
Protection of the Environment Operations Act 1997	This Act is of most relevance to work being carried out under this contract. It integrates into one Act all the controls necessary to regulate pollution and reduce degradation of the environment, provides for licensing of scheduled development work, scheduled activities and for offences and prosecution under this Act.	**High Relevance** The POEO Act provides for the issuing of environmental protection notices to control work and activities not covered by licences. Section 148 of the Act requires a pollution incident causing or threatening material harm to the environment to be notified to the EPA and other authorities immediately.

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
		Sydney Metro's Principal Contractor may choose to apply for an EPL from NSW EPA. If an EPL is granted for this Project, then this CEMP and Sub-plans would be revised to reflect the EPL's requirements. Project activities may be carried out under the Sydney Trains EPL 12208, where they are required as part of a Sydney Trains rail possession.
Roads Act 1993	This Act and associated Regulation primarily provide for such things as the opening and closing of public roads, identification of road boundaries and road widening, road levels, classification of public roads, road work, protection of public road and regulation of traffic, regulation of work, structures and activities.	**Medium Relevance** This act governs Road Occupancy Licences (ROL) that will be required for works on and round roads. An ROL cannot be refused to carry out works required under an SSI approval as per Section 115ZH of the EP&A Act.
Rural Fires Act 1997	This Act is intended to prevent, mitigate and suppress bush and other fires. It places a duty on the Principal Contractor as the occupier of the site to extinguish fires during bush fire danger periods or if unable to do so notify appropriate firefighting authorities of the existence of the fire and its location.	**Low Relevance** The Project's work sites, and surrounding areas are not prone tobush fires.
Sydney Water Act 1994 ***Sydney Water Regulation 1994***	This Act and Regulation establishes the Sydney Water Corporation as a statutory State owned corporation. The functions of the Sydney Water Corporation is to supply and store water, provide sewerage services, provide stormwater drainage and dispose of waste water within its area of operations.	**High Relevance** Coordination will be required with Sydney Water during the works.
Waste Avoidance and Resource Recovery Act 2001	This Act repeals the *Waste Minimisation and Management Act 1995*. The purpose of the Act is to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecological sustainable development. The Act provides for the making of policies and strategies to achieve these ends. It is an offence under the *Protection of the Environment Operations Act* to wilfully or negligently dispose of waste in a manner that harms or is likely to harm the environment.	**High Relevance** The relevance of the Act to this project is to implement the strategies by adopting the hierarchy of avoidance; avoidance of unnecessary resource consumption; resource recovery (including reuse, reprocessing, recycling and energy recovery), disposal (as a last resort).
Water Act 1912	This Act provides for licences to extract water for Construction purposes either from surface or artesian sources. Should Construction water be extracted from surface (other than sedimentation ponds) or artesian sources a licence will be required.	**Low Relevance** It is not proposed that Construction water will be obtained from surface (e.g. creeks, lakes etc.) or artesian sources.
Water Management Act 2000	This Act repeals the Rivers and Foreshores Improvement Act, 1948 and the Water Act, 1912. The provisions of both the aforesaid Acts are progressively	**No Relevance**

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
Water Management (General) Regulation 2004	rescinded as Water Management Plans are prepared and gazetted for catchment areas within the state. This Act and Regulation provide for the protection, conservation and ecologically sustainable development of water sources of the State and in particular to protect, enhance and restore water sources and their associated ecosystems.	Projects assessed under Division 5.2 of the EP&A Act are exempt from obtaining water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91.

Other requirements

Approval / Licence	Requirement	Relevant section of CEMP
EPL	Required for activities listed in Schedule 1 of the POEO Act	Section 2.6
Section 143 notice of POEO Act	Prior to transportation of waste to receiving facility	Appendix E - Procedure 4: Waste and Spoil
Road Occupancy Licences	Prior to commencement of traffic related works that require access to roads	Section 2.2 and Appendix B

Appendix C: Risk Assessment

This appendix includes an indicative risk assessment for the Project. Downer is responsible for revising this risk assessment to adequately reflect any changes to their scope of works and/or methodologies and to conform to their EMS.

All indicative environmental issues have been assessed in accordance with the table below:

Risk Assessment Rankings:

- >31 Very High;
- 22 to 30 High;
- 11 to 21 Medium; and
- 1 to 10 Low.

Risks will be reassessed by Downer following the consideration of control measures. Downer will be responsible for nominating an owner for the implementation of management measures.

Issues or activities that represent a Very High risk after the application of control measures are not to be undertaken.

The risk assessment process and its review were conducted at Project start-up phase (CEMP initial approval - February 2021). The risks were reassessed following a major change in scope following the completion of a significant portion of platform demolition and re-build. Risk were again reassessed in September 2022.

The outcomes of the updated risk assessment, conducted in October 2023 are as below. The risks are reassessed at each updated to the CEMP or following any significant change in scope (whichever comes sooner).

IDENTIFICATION							ASSESSMENT OF CONTROLS			
No	ACTIVITY	*ENVIRONMENTAL ASPECTS*	*ENVIRONMENTAL IMPACTS*	RISK RATING RISK Assessment (current) Likelihood	Consequence	Risk Rank	CONTROLS Note: Controls in Planning conditions and approved CEMP & Sub-plans prevail to the extent of any inconsistency with those below.	RESIDUAL RISK FINAL RISK Assessment (current) Likelihood	Consequence	Risk Rank
By activity										
1	***Environmental Management (GENERAL)***	CEMP and Sub-Plans inadequate for the project scope	Reduced environmental performance. Non-conformances. Time delays for CEMP updates	Very unlikely	Severe	**19**	Review the project planning approval and statutory documentation for requirements relevant to the Project. Identify and implement approval requirements within the CEMP, subplans and ERAPs. Check contract documentation. Identify and implement requirements from the Contract. Establish a register of approvals, licenses and permits. ER oversight of review and implementation of plans.	Very unlikely	Minor	**4**

		Lack of environmental objectives and targets	Failure to incorporate environmental objectives and targets into high-level decision making which leads to reduced environmental performances	Very unlikely	Severe	**19**	Review the project planning approval and statutory documentation for requirements relevant to the Project. Identify and implement approval requirements within the CEMP, subplans and ERAPs. Check contract documentation. Identify and implement requirements from the Contract. Establish a register of approvals, licenses and permits. ER oversight of review and implementation of plans, including objectives and targets.	Very unlikely	Minor	**4**
		Lack of environmental training and education	Decreased motivation and awareness required for behavioural change	Likely	Major	**24**	Utilise Downer EMS and environmental SME's to manage the project as required and mitigate through toolbox talks, inductions, inspections, internal and external meetings with environmental aspects. Training and supervision.	Unlikely	Minor	**7**

		Not identifying appropriate approvals, licenses or permits required and proceeding without them	Works delayed, infringements, prosecution, poor community relations and reputational loss.	Very likely	Severe	31	Review the project planning approval and statutory documentation for requirements relevant to the Project. Identify and implement approval requirements within the CEMP, subplans and ERAPs. Check contract documentation. Identify and implement requirements from the Contract. Establish a register of approvals, licenses and permits. ER oversight, training and induction, implementation of EMS and CEMP.	Unlikely	Minor	4
		Outdated risk assessment register	Failure to identify actual environmental risks of site activities leading to reactiveness	Likely	Major	24	Revision of risk register at regular intervals. Ongoing review of risk based on site inspections etc. Lessons learnt being shared. 4 week look ahead via planning / construction meetings with appropriate stakeholders. Fortnightly construction updates.	Unlikely	Minor	7
		Resourcing (Review / Approval	Timeliness of approval documentation being provided and time in day to complete all tasks	Very likely	Major	28	Active collaboration. Meeting (fortnightly and monthly meeting). Open communication. Prioritisation.	Unlikely	Moderate	11

		Resourcing	Burn out, skills shortage (domestic and international), market demand.	Almost certain	Major	**32**	Active resourcing (via renumeration offers / reviews). Team events (covid friendly). Active retention. Fostering a positive workplace culture. Collaboration between internal and external work groups.	Likely	Moderate	**16**
2	***Site establishment (Ancillary Facilities / Minor AF)***	Traffic/car spaces	Loss of parking availability to adjacent residential and commercial properties could result in community complaints.	Almost certain	Major	**32**	Toolbox meetings with internal and external stakeholders. Signage. Community notification. Complaint response process	Very likely	Minor	**18**
		Visual amenity	Light spill occurring during possession / OOHW periods, resulting in complaints.	Very likely	Moderate	**23**	Preplanning of light tower positions. Toolbox talks. Site inspections. Implementation of VAMP.	Unlikely	Minor	**7**
		Appropriate selection and management of the ancillary facilities	Inadequate assessment of impacts to surrounding business and residential receivers and environmental receptors. Potential for complaints.	Unlikely	Moderate	**11**	Appropriate notification. Initial selection of sites. Approval process.	Very unlikely	Minor	**4**
		AF / MAF being installed improperly or not in compliance with planning approval	Non-compliances. Timing delays for applications	Almost certain	Moderate	**29**	Toolbox talks. Approval process though checklists etc. Training. Planning meetings. Inspections.	Very unlikely	Minor	**4**
		Temporary construction sheds and storage containers	Surrounding aesthetic temporary altered during construction.	Very likely	Moderate	**23**	Correct initial placement to reduce impacts. Hoardings. Implementation of VAMP. Don't double-stack.	Very unlikely	Minor	**4**

		Management of heavy vehicles	Complaints from sensitive receivers due to increased level and frequency of noise.	Unlikely	Minor	7	Implement measures outlined within CTMP. Toolbox and induction of proper management. Undertake good neighbour approach. Scheduling of deliveries during standard hours.	Very unlikely	Minor	4
		Truck deliveries	Un-approved deliveries resulting in non-conformance with project requirements. Noise impact to community / potential complaints.	Likely	Moderate	16	Implement measures outlined within CTMP. Toolbox and induction of proper management. Undertake good neighbour approach. Scheduling of deliveries during standard hours.	Unlikely	Minor	7
3	*General construction activities*	General construction traffic disturbing public access between local roads.	Disturbance to local residents resulting in complaints being made, limited access, potential for delays at local road access points resulting in complaints.	Unlikely	Minor	7	Mitigation measures undertaken in accordance with TCP, ROL's, CTMP and good neighbour approach. Active notification via comms team.	Unlikely	Minor	7
		Sediment laden runoff from construction works leaving site	Degradation of local watercourses. Increased turbidity in local water ways resulting in impact on aquatic life. Fines for sediment escaping site.	Likely	Major	24	Mitigation Measures as per SWMP and n any ESCP to be implemented. Install erosion and sediment controls within the project area. Ensure measures are inspected and maintained as the works progress and also prior to and post rainfall events. Provide training and awareness on the need to prevent pollution. Relevant people to undertake Erosion and Sediment Control training.	Unlikely	Moderate	11

		Non-compliant water from construction works discharged from site	Non-compliant water entering stormwater system waterways (i.e. polluting - not compliant with discharge criteria).	Unlikely	Major	**17**	Environmental Manager to approve all water discharges from site. Induction and toolbox talks. Toolbox training on site procedures for water discharge. Educate site staff on requirements and consequences of prosecution	Very unlikely	Moderate	**8**
		Exhaust from plant and equipment.	Emissions resulting in air pollution.	Unlikely	Minor	**7**	Inductions and toolbox training on dust and air quality management. Well maintained plant/ equipment and prestart checks and servicing. Non-compliant vehicles removed from site / repaired.	Very unlikely	Minor	**4**
		Loss of on-street carparking in adjacent residential streets and commercial areas during construction.	Loss of parking availability to adjacent residential and commercial properties could result in community complaints.	Very likely	Moderate	**23**	Community notifications in accordance with the OCCS. Site vehicles shall be parked within the rail corridor and not affect public parking area where possible. Develop CTMP / Traffic control procedures. Limited street parking available around the Project sites.	Very unlikely	Minor	**4**

		Noise and vibration from general construction activities resulting in impact to residents	Disturbance to residents or neighbouring businesses. Potential for complaints.	Almost certain	Moderate	**29**	Mitigation measures as per NVMP are to be implemented. Respond to community enquiries and complaints in accordance with Sydney Metro requirements and implement the OCCS. Consult with the community in relation to upcoming activities that may result in concern. Monitor noise and vibration for compliance as the works progress at receiver locations. Provide periods of respite for high noise generating activities. Apply noise mitigation measures during entire project. Noise efficient equipment to be used on site. Determine vibration limits and structure/receiver offset distances. Ongoing vibration monitoring during vibration intensive works.	Very likely	Minor	**18**

4	*Stockpiling*	Dust	Inappropriate stockpiling of vegetation and topsoil, resulting in wind and water erosion causing weed/seed dispersion offsite.	Unlikely	Minor	7	Develop Environmental Control Maps to show stockpile areas. Utilise appropriate locations for stockpiling (away from waterways, watercourses, drains where feasible and reasonable). Designated vegetation stockpiling areas. Minimise stockpiling / Use temporary stockpiling. Cover stockpiles if left for extended periods	Very unlikely	Minor	4
		Visual amenity	Surrounding aesthetic temporary altered during construction	Unlikely	Minor	7	The work area shall be maintained in an orderly manner.	Very unlikely	Minor	4

		Contamination	Stockpiling contaminated material, resulting in potential for contamination to spread via wind or water. Potential for cross contamination of clean vs contaminated material.	Likely	Moderate	**16**	Implement contamination management procedures from within SWMP. Identify any contamination hotspots and incorporate procedures for these locations into construction documentation. Apply the unexpected finds procedure within the SWMP. Induct personnel on unexpected finds procedure. Inspections of excavated and filled surfaces would be made during Construction to determine the presence of visible asbestos. Conduct further site investigations to determine the presence and extent of contamination prior to Construction works commencing. Contaminated soils would not be stockpiled on the structural fill layer or formation layers.	Very unlikely	Minor	**4**
5	***Excavation/Piling/unstabilised area***	Dust	Material leaving site during windy days, resulting in complaints and bad air quality	Unlikely	Minor	**7**	Monitoring weather forecast, daily check-in with site supervisors, pre-wetting down areas, weekly environmental inspections, site team inspections, notifying coms team when such event is forecast, water truck/water cart trailer/hoses/sprinklers	Very unlikely	Minor	**4**

		Noise	Disturbance to residents or neighbouring businesses. Potential for complaints.	Likely	Moderate	**16**	Mitigation measures as per NVMP are to be implemented. Respond to community enquiries and complaints in accordance with Sydney Metro requirements and implement the OCCS. Consult with the community in relation to upcoming activities that may result in concern. Monitor noise and vibration for compliance as the works progress at receiver locations. Provide periods of respite for high noise generating activities. Apply noise mitigation measures during entire project. Noise efficient equipment to be used on site. Determine vibration limits and structure/receiver offset distances. Ongoing vibration monitoring during vibration intensive works.	Unlikely	Minor	**7**
		Works with the potential to intercept groundwater table.	Ground water entering excavations. Without appropriate safeguards onsite could lead to ground water contamination. Spreading contamination via groundwater management.	Unlikely	Minor	**7**	Implement the controls within Appendix E - Procedure 2: Groundwater Induction and toolbox talks Toolbox training on site procedures for water discharge. Educate site staff on requirements and consequences of prosecution. Environmental Manager/representative to approve all water discharges from site.	Very unlikely	Minor	**4**

		Disturbance of ASS/PASS	Mobilisation of metals within runoff to levels toxic to natural systems. Release of acidic runoff.	Unlikely	Minor	7	Assess risk for acid sulphate soils, and if the risk is determined to be high then implement the Acid Sulphate Soils. Procedure (refer to SWMP). Awareness training in the identification and management of ASS. Provide containment and treatment facility on site. Ensure ASS material is left under the water table, disposed off-site or appropriately treated in a bunded area with sump.	Very unlikely	Minor	4
		Unknown Contamination	Unknown contamination being identified resulting in program and cost delays. Health impacts	Likely	Moderate	16	If contaminated soil is encountered, all works are to stop in the vicinity of the find and investigations commence. Unexpected finds procedure within the SWMP to be implemented. Induct personnel on location, type, nature, concentration of contaminants on site if found.	Very unlikely	Minor	4

		Known Contamination	Incorrect classification of waste (spoil) resulting in incorrect / illegal disposal/reuse.	Unlikely	Major	**17**	Inductions, toolbox talks and training on recycling facilities and waste segregation practices. Separation of waste on site. Tracking of disposal processes. All contamination hotspots would be clearly marked in the field (where possible). Hotspots will be shown within contamination mapping and will be included in the Permit to Disturb process. Implement contamination management procedures from within SWMP. Identify any contamination hotspots and incorporate procedures for these locations into construction documentation. Apply the unexpected finds procedure within the SWMP. Induct personnel on unexpected finds procedure.	Very unlikely	Moderate	**8**
6	***Concrete pours***	Washout activities	Sediment laden/alkaline water polluting surrounding stormwater system /watercourses.	Unlikely	Major	**17**	Utilise wash out areas / bags as outlined within ESCP / ECM. Inductions and toolbox. Ongoing management by on-site enviro team.	Very unlikely	Moderate	**8**

		Pour overrun	Overrun of project hours, resulting in potential non-compliance with planning approval and complaints	Unlikely	Moderate	**11**	Preplan with OOHW applications being submitted. Scheduling of works. Submit last minute application if needed. Ongoing consultation with Metro and ER. Active community management of overruns if needed.	Very unlikely	Minor	**4**
		Concrete equipment malfunction	Failure of equipment resulting in concrete being released into local environment. Complaints and property damage.	Unlikely	Moderate	**11**	Ensure equipment brought to site is working properly. Ensure ERSED in place generally. Clean up properly. Community management following event.	Unlikely	Minor	**7**
7	***Possession works***	Out of hours works	Scope or scheduling not appropriately assessed, resulting in louder than anticipated outcomes or non-compliances. Construction team not providing the scope of works in time for appropriate noise modelling to be undertaken	Almost certain	Severe	**34**	Site team to focus on high noise impact activities, t-meetings, using typical/HB made the process more efficient, modelling tool (Gatewave) ability to change scope of works and impact on modelling, competent environmental staff, walk with PMs (checking lighting requirement, plant/equipment needs checks...etc).	Unlikely	Minor	**7**

		Provision of Respite Offers / Alternative Accommodation	Inappropriate modelling resulting in incorrect application of RO/AA to community, resulting in complaints.	Unlikely	Major	**17**	Ensure robust review of modelling within OOHW applications. Ensure scopes are suitably included within noise model. Allow the provision of discretional RO/AA to surrounding residences if complaints are submitted.	Very unlikely	Moderate	**8**
		Upcoming possessions	Lessons learnt from previous shutdown not applied	Unlikely	Major	**17**	Review lessons learnt and ensure actions have been attributed and closed out. Utilise lessons learnt from other possessions.	Very unlikely	Minor	**4**
		OOHW Application Submission	Lateness of application, resulting in approval delays. Late scope sent by other contractors.	Likely	Moderate	**16**	Ensure submission deadlines are met and reviews are undertaken in a timely manner	Unlikely	Moderate	**11**

8	*Works near heritage building / AARD areas*	Impact to heritage items including vibration	Damage to heritage fabric of heritage items by Project works (service strike, vibratory works)	Likely	Major	**24**	Implement the mitigation measures within the HMP and CNVMP. General inductions toolbox training on heritage management protocols. Label any known heritage items on Environmental Control Maps. Work within the safe working distances nominated in the NVMP. Undertake vibration compliance monitoring as per the NVMP. Clearly highlight no-go zones on the ECM and communicate requirements to construction personnel during pre-start briefs, inductions and toolbox talks. Demarcation of worksites and communicate it clearly with all construction personnel. The method for the demolition of existing elements at the Project sites would be developed to minimise direct and indirect impacts to adjacent and / or adjoining heritage items. Undertake appropriate vibration baseline monitoring.	Very unlikely	Moderate	**8**

			Unexpected finds	Work delays, additional studies, approvals required, damage to heritage item.	Unlikely	Moderate	**11**	Implement the mitigation measures within the HMP. General inductions toolbox training on heritage management protocols. Label any known heritage items on Environmental Control Maps. If suspected heritage item encountered. Works to stop immediately and implement the Sydney Metro Unexpected Heritage Finds Procedure (refer to HMP). Clearly highlight no-go zones on the ECM and communicate requirements to construction personnel during pre-start briefs, inductions and toolbox talks.	Very unlikely	Minor	**4**
			Archaeological oversight	Ground works not adequately supervised	Unlikely	Moderate	**11**	Implement the mitigation measures within the HMP. General inductions toolbox training on heritage management protocols. Label any known heritage items on Environmental Control Maps. If suspected heritage item encountered. Works to stop immediately and implement the Sydney Metro Unexpected Heritage Finds Procedure (refer to HMP). Clearly highlight no-go zones on the ECM and communicate requirements to construction personnel during pre-start briefs, inductions and toolbox talks. Ensure adequate supervision by archaeologist	Very unlikely	Minor	**4**

9	*Utility works*	Impact to existing services	Service strike leading to environmental degradation	Almost certain	Severe	**34**	Develop and implement the Utilities Management Strategy in accordance with the Utilities Management Framework Engage a Utilities Coordination Manager (UCM) to oversee the coordination of utility works across the project and with third part service providers. The UCM will collaborate with the Community and Stakeholder Manager, the Place Manager and, where required, the Community Complaint Mediator to mitigate impacts to the local community during utility works and to resolve any community complaints relating to utility works. Implement a Permit to Disturb Induction and toolbox talks Detailed Site Survey to be managed by an appropriately qualified surveyor.	Very unlikely	Minor	**4**
		Working outside of SPIR project boundary	Community raising issue with working outside of SPIR boundary.	Very unlikely	Moderate	**8**	Metro planning advice that utility works outside of the project boundary and covered by the planning approval. Community consultation of upcoming works	Very unlikely	Minor	**4**
		Utility disruptions within standard hours and OOHW periods.	impacts to residents (water/power), resulting in complaints.	Unlikely	Moderate	**11**	Review of weather (times of high flow) to limit impact on infrastructure and residents, Active consultation with utility providers and preparation of OOHW as required.	Very unlikely	Minor	**4**

	10	***Storage and use of hazardous substances***	Storage of hazardous substances, leaking plant and equipment and spillage from refuelling.	Localised ground contamination / pollution of stormwater and requiring clean-up and/or receiving fines. Risk of igniting volatile substances. Unauthorised access to site / potential vandalism/damage leading to pollution.	Likely	Moderate	**16**	Induction, toolbox talks and training on appropriate handling and storage of liquids. All storm water drains should be identified prior to works and protection installed. Storage areas to be away from sensitive areas and appropriately bunded. SDS approved prior to bringing hazardous substances on site including risk assessment. Environmental Control Maps show storage locations and associated controls e.g. spill kits, etc. Training in use of spill kits. Contingency plans would be developed to deal with any spills which might occur during Construction. Clearly label containers. Regular auditing and inspection of storage areas and materials. Make storage areas restricted access areas. Reduce/eliminate need for hazardous substances. Ensure all work sites are secure before leaving the site. All liquids i.e. paint etc. are to be securely locked away at the end of each day.	Unlikely	Minor	**7**

11	*Vegetation removal/pruning*	Vegetation trimming /clearing required outside approved work area	Unauthorised works / removal of vegetation outside defined work area, possibility of removing threatened species, fines incurred.	Very unlikely	Moderate	**8**	Implement the controls within Appendix E – Procedure 1: Biodiversity Induction and toolbox training on clearance zones and required protection measures If vegetation, other than grass and weeds, needs to be trimmed or removed, further assessment would be undertaken in accordance with the CEMF and CoA. If trees require trimming or removal, the requirements of CoA E5 would be implemented. Inspections during clearing activities. Fencing in place/ clear marking of trees to be retained and cleared / demarcation areas / plans showing clearing areas. Preclearing checklist to be completed before any clearing of vegetation.	Very unlikely	Minor	**4**
		Secondary Approvals (i.e. Councils)	Councils not providing approval to remove trees / vegetation	Likely	Moderate	**16**	Active management and consultation during design phase and construction phase. Ongoing discussions with Councils. Capture of trees within Tree Management Strategy. Review of legal options of CSSI vs Council approvals.	Unlikely	Moderate	**11**

		Impacts to threatened vegetation (TEC)	Unauthorised works / clearing of known TEC communities and protected vegetation, resulting in non-compliance and regulatory action. Potential for offsetting to be enacted.	Unlikely	Major	**17**	Undertake segregation fencing of known TEC areas. Undertake supervision of any clearing via arborists / ecologists. Utilise internal tree permits and Tree Reports. Ensure compliance with CEMP hold points. Active management when working in close proximity to known areas to avoid strikes. Inductions and to boxes. Use of ECM's.	Very unlikely	Major	**13**
12	***MSB/Above ground structures***	Visual impact of construction works (steel structure)	Complaints by community	Unlikely	Moderate	**11**	Consultation of upcoming works with surrounding residences. Utilise visual impact assessments. Proactive design of stations and MSB's to minimise visual impacts	Very unlikely	Minor	**4**
		Change of works force (i.e. civil workers moving to fit out contractors), behaviour	New workforce untrained/unfamiliar with site requirements, resulting in potential environmental or community issues.	Likely	Moderate	**16**	Inductions to be reviewed, retrained workers, advising new crew of things happening on site (fuel storage, visual amenity, heritage…etc), review induction form for relevance to stage of works.	Unlikely	Moderate	**11**
		Bridge/road shut down	Traffic impacts due to increased personnel and road closures.	Likely	Moderate	**16**	TMP, TCP, tool boxing where trades can park, traffic controls, CA for road closure, community notifications, signage, VMS boards, diversions/detours.	Unlikely	Minor	**7**
13	***Community***	General worker behaviour	Inappropriate worker behaviour (i.e. smoking outside of designated zones, worker parking, work interacting with the community), resulting in complaints	Almost certain	Moderate	**29**	Toolbox, talks, inspection and supervision. Designated smoking areas / ashtray. Alternate worker parking investigations. Internal and external communications with contractor. Inductions	Likely	Minor	**12**

		Avoidable complaints	Inappropriate environmental controls being in place. Truck idling, Working Parking, resulting in completion. Concrete spillage. Property damage	Likely	Moderate	**16**	Toolbox, talks, inspection and supervision. Inductions. Pre-possession inspections. Lessons Learnt. Team meetings. Traffic controls for parking idling. Dilapidation surveys. Selection of plant prior to works occurring. Utilisation of monitoring data. Implementation of CEMP and sub-plans.	Unlikely	Minor	**7**
		AA and RO process	Not adequate notice causing distress on the residents and pressure on comms team. Financial stress (hard to find affordable accommodation)	Likely	Major	**24**	OOHWA submitted 15 business days prior to work commencing, Review process, ongoing collaboration with SM, lessons learnt from last shutdown (better RO). Discretionary RO/AA	Unlikely	Moderate	**11**
		Management of complaints	Complaints not been captured or actioned in an appropriate timeframes	Unlikely	Major	**17**	Site good at notifying comms team of issues that might result in complaints (proactive approach). Active and open channel of communication between contractor and Sydney Metro. Use of on call resources. Review of complaints line.	Very unlikely	Moderate	**8**

	ENTERPRISE RISK CONSEQUENCES					
	C6 Insignificant	C5 Minor	C4 Moderate	C3 Major	C2 Severe	C1 Catastrophic
Environment	No appreciable changes to environment and/or highly localised event.	Change from normal conditions within environmental regulatory limits & environmental effects are within site boundaries.	Short-term and/or well-contained environmental effects. Minor remedial actions probably required.	Impacts external ecosystem & considerable remediation is required.	Long-term environmental impairment in neighbouring or valued ecosystems. Extensive remediation required.	Irreversible large-scale environmental impact with loss of valued ecosystems.

Sydney Metro Consequence Criteria

Sydney Metro Likelihood Criteria and Risk Matrix

Probability: One off event How likely?	Frequency: Repeated How often?	Likelihood		Consequences C6 Insignificant	C5 Minor	C4 Moderate	C3 Major	C2 Severe	C1 Catastrophic *Transformational for opportunities*
Expected to occur frequently during time of activity or project. Greater than a 90% chance of occurring.	10 times or more every year	Almost certain	L1	20	22	29	32	34	36
Expected to occur occasionally during time of activity or project. A 75-90% chance of occurring.	1-10 times every year	Very Likely	L2	14	18	23	28	31	35
More likely to occur than not occur during time of activity or project A 50-75% chance of occurring.	Once each year	Likely	L3	9	12	16	24	27	33
More likely not to occur than occur during time of activity or project. A 25-50% chance of occurring.	Once every 1 to 10 years	Unlikely	L4	6	7	11	17	25	30
Not expected to occur during the time of activity or project. A 10-25% chance of occurring.	Once every 10 to 100 years	Very Unlikely	L5	3	4	8	13	19	26
Not expected to ever occur during time of activity or project. Less than 10% chance of occurring.	Less than once every 100 years	Almost Unprecedented	L6	1	2	5	10	15	21

Appendix D: DTI and Sydney Metro Environment and Sustainability Policies, Sydney Metro Environment and Sustainability Commitments and Downer ISO 14001:2015 Certification

Transport for NSW | Environment & Sustainability Policy | sydney METRO

This Policy reflects a commitment in our delivery of the Sydney Metro program to:

- Align with, and support, Transport for NSW (TfNSW) Environment & Sustainability Policy.
- Optimise sustainability outcomes, transport service quality, and cost effectiveness.
- Develop effective and appropriate responses to the challenges of climate change, carbon management, resource and waste management, land use integration, customer and community expectation, and heritage and biodiversity conservation.
- Be environmentally responsible, by avoiding pollution, enhancing the natural environment and reducing the project ecological footprint, while complying with all applicable environmental laws, regulations and statutory obligations.
- Be socially responsible by delivering a workforce legacy which benefits individuals, communities, the project and industry, and is achieved through collaboration and partnerships.

To deliver on these commitments, the Sydney Metro team will:

Industry leadership

- Implement coordinated and transparent decision making, by engaging with stakeholders and suppliers, encouraging innovation and demonstrating sustainability leadership.
- Explore new benchmarks for the transport infrastructure sector by requiring high standards from our designers, contractors and suppliers, building on experience gained through development of Sydney Metro Northwest.

Community and customer

- Provide accessible, safe, pleasurable, and convenient access and transport service for all customers.
- Establish positive relationships with community and stakeholders to maximise opportunities to add value to local communities.

Land use integration and place making

- Create desirable places, promote liveability, cultural heritage, and optimise both community and economic benefit.
- Balance transit oriented development opportunities with stakeholder expectations.

Embedding environmental and social sustainability

- Establish robust sustainability objectives and targets.
- Maintain an environmental management system that is integrated into all our project activities.
- Ensure thorough and open environmental assessment processes are developed and maintained.
- Develop and maintain an environmental management framework to embed best practice pollution management and sustainable outcomes during construction.
- Apply effective assurance processes to monitor performance against the project environment and sustainability objectives and identify appropriate reward or corrective action, as required.
- Apply environment and sustainability specific processes to the procurement of delivery activities.

Accountability

- Undertake public sustainability reporting.
- Hold employees and contractors accountable for proactively meeting their environmental and social sustainability responsibilities.
- Provide appropriate training and resources necessary to meet our responsibilities.

Rodd Staples
Program Director, Sydney Metro

DT INFRASTRUCTURE
A GAMUDA Company

Environmental Sustainability Policy

Document Reference Number: DTI-HESQ-PO200

ENVIRONMENTAL SUSTAINABILITY

POLICY

This document outlines the DT Infrastructure policy for Environment and Sustainability and applies to DT Infrastructure; hereafter referred to as DTI.

OUR PURPOSE

Our goal is to provide our customers with environmentally sustainable infrastructure services.

OUR COMMITMENTS

To achieve our purpose, we will:

- minimise the short- and long-term impacts of our activities on the local environment and communities through responsible environmental sustainable management in design, planning, construction, manufacturing and operation.
- promote a positive culture by implementing initiatives that promote sustainable innovation
- our products and services will be optimised to improve our environmental sustainability performance.
- comply with applicable environmental legislation, industry guidelines and standards and customer requirements
- implement responsible resilient work practices to minimise the impact on local community
- implement and maintain an Environmental Management System in accordance with the international standard AS/NZS
- ISO 14001 integrates requirements into the overall operational system
- establish, monitor, and review our environmental sustainability targets and objectives and identify opportunities to improve it
- regular audits and reviews will help us to evaluate the performance, compliance, and effectiveness of our environmental management system.
- implement effective controls to identify and evaluate environmental risks, eliminate or reduce them, or to reduce their impact.
- take all practical measures to protect biodiversity and ecosystems and prevent pollution
- drive innovation to identify sustainable supply chain; reduce and management energy, waste and water consumption; decrease and manage air emission and effluents, and climate change adaptation and mitigation.
- procure goods and services that minimise environmental risks and maximise sustainable benefits and opportunities for the entire life cycle
- consult with stakeholders and report on our environmental sustainability performance regularly
- educate, train, and encourage our employees and business partners in order to help them understand their responsibilities when it comes to implementing environmental sustainability principles and practices. We will also display this policy and make it public, as well as share it with interested parties.

CEO and Managing Director
DT Infrastructure

GRS CERTIFICATION

Certificate of Registration

Awarded to

Downer - Australian Operations.
Road Services, Transport Projects and Utilities

Level 10, 567 Collins Street, Melbourne, VIC 3000, Australia
(This is a multi site certification, other sites are referred in Annexure-A)

Operates an Environmental Management System which complies with the requirements of

ISO 14001: 2015

for the following scope:

Downer works across the full infrastructure value chain including design, construction, commissioning, operation, monitoring, asset management, maintenance, refurbishment, renewal and replacement.
(the detailed description of scope is referred in Annexure-B)

Certificate Number: 477140016100120

Original Issue Date: 09/09/2016
Current Issue Date: 05/09/2019
Expiry Date: 04/09/2022

Sharmin Mahmud, MBA, PhD
General Manager Risk and Compliance

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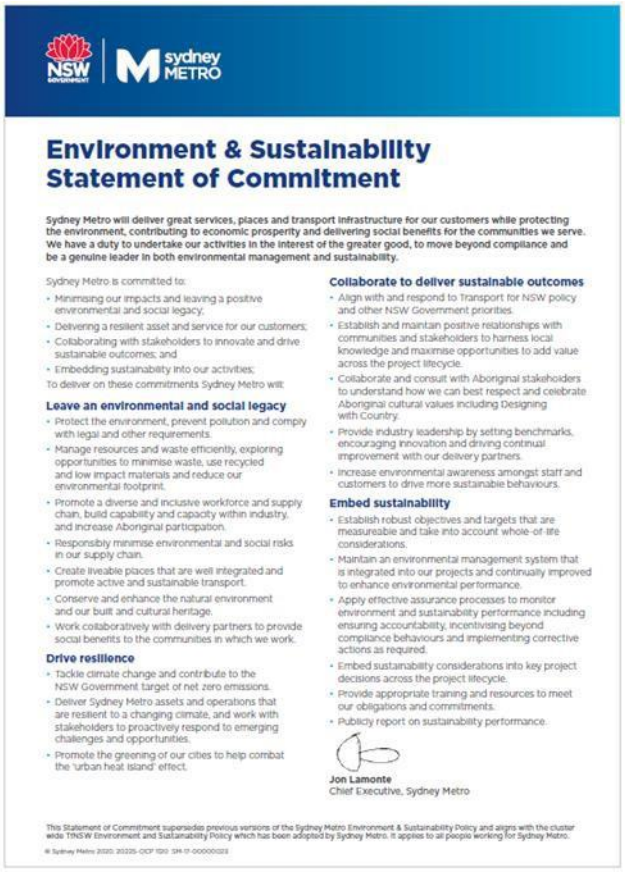
JAS-ANZ

ISO 14001 ENVIRONMENT

IAF



NSW GOVERNMENT | sydney METRO

Environment & Sustainability Statement of Commitment

Sydney Metro will deliver great services, places and transport infrastructure for our customers while protecting the environment, contributing to economic prosperity and delivering social benefits for the communities we serve. We have a duty to undertake our activities in the interest of the greater good, to move beyond compliance and be a genuine leader in both environmental management and sustainability.

Sydney Metro is committed to:

- Minimising our impacts and leaving a positive environmental and social legacy;
- Delivering a resilient asset and service for our customers;
- Collaborating with stakeholders to innovate and drive sustainable outcomes; and
- Embedding sustainability into our activities;

To deliver on these commitments Sydney Metro will:

Leave an environmental and social legacy

- Protect the environment, prevent pollution and comply with legal and other requirements.
- Manage resources and waste efficiently, exploring opportunities to minimise waste, use recycled and low impact materials and reduce our environmental footprint.
- Promote a diverse and inclusive workforce and supply chain, build capability and capacity within industry, and increase Aboriginal participation.
- Responsibly minimise environmental and social risks in our supply chain.
- Create liveable places that are well integrated and promote active and sustainable transport.
- Conserve and enhance the natural environment and our built and cultural heritage.
- Work collaboratively with delivery partners to provide social benefits to the communities in which we work.

Drive resilience

- Tackle climate change and contribute to the NSW Government target of net zero emissions.
- Deliver Sydney Metro assets and operations that are resilient to a changing climate, and work with stakeholders to proactively respond to emerging challenges and opportunities.
- Promote the greening of our cities to help combat the 'urban heat island' effect.

Collaborate to deliver sustainable outcomes

- Align with and respond to Transport for NSW policy and other NSW Government priorities.
- Establish and maintain positive relationships with communities and stakeholders to harness local knowledge and maximise opportunities to add value across the project lifecycle.
- Collaborate and consult with Aboriginal stakeholders to understand how we can best respect and celebrate Aboriginal cultural values including Designing with Country.
- Provide industry leadership by setting benchmarks, encouraging innovation and driving continual improvement with our delivery partners.
- Increase environmental awareness amongst staff and customers to drive more sustainable behaviours.

Embed sustainability

- Establish robust objectives and targets that are measureable and take into account whole-of-life considerations.
- Maintain an environmental management system that is integrated into our projects and continually improved to enhance environmental performance.
- Apply effective assurance processes to monitor environment and sustainability performance including ensuring accountability, incentivising beyond compliance behaviours and implementing corrective actions as required.
- Embed sustainability considerations into key project decisions across the project lifecycle.
- Provide appropriate training and resources to meet our obligations and commitments.
- Publicly report on sustainability performance.

Jon Lamonte
Chief Executive, Sydney Metro

This Statement of Commitment supersedes previous versions of the Sydney Metro Environment & Sustainability Policy and aligns with the cluster wide TfNSW Environment and Sustainability Policy which has been adopted by Sydney Metro. It applies to all people working for Sydney Metro.

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*Please note DTI is currently undergoing an ISO audit to obtain its own certification. Currently working under Downer's EDI ISO certification.

Appendix E: Environmental Procedures

Procedure 1: Biodiversity

Impact: Biodiversity impacts related to the Project are expected to be minor. There will be some removal of trees and vegetation associated with site establishment, construction of the services building, and embankment stabilisation works. Pre-clearance inspections will be undertaken priorto the removal of any trees.

Objective	To comply with contractual and legislative requirements and ensure that native fauna and flora are protected from Construction activities			
Targets	No death or injury to fauna No unapproved destruction of flora			
Legal, Contractual & Other Requirements	Planning consent conditions – SSI 8256			
Site specific planning / approval conditions / licence conditions	CoA – E3-E6 Mitigation measures committed in the EIS & SPIR CEMF Section 11			
Potential impacts and Initial Risk Rating Refer to Appendix 3 for Risk Matrix	**Potential impact**	Initial Risk Rating		
		P X	C	Risk
	Death or injury of fauna	L4	C3	17
	Unapproved damage or removal to threatened plant species, threatened vegetation community or habitat resources	L4	C3	17
	Unapproved removal or trimming of vegetation	L4	C5	7

Controls (means & resources)

Commitments & Mitigation Measures outlined in the EIS / SPIR:

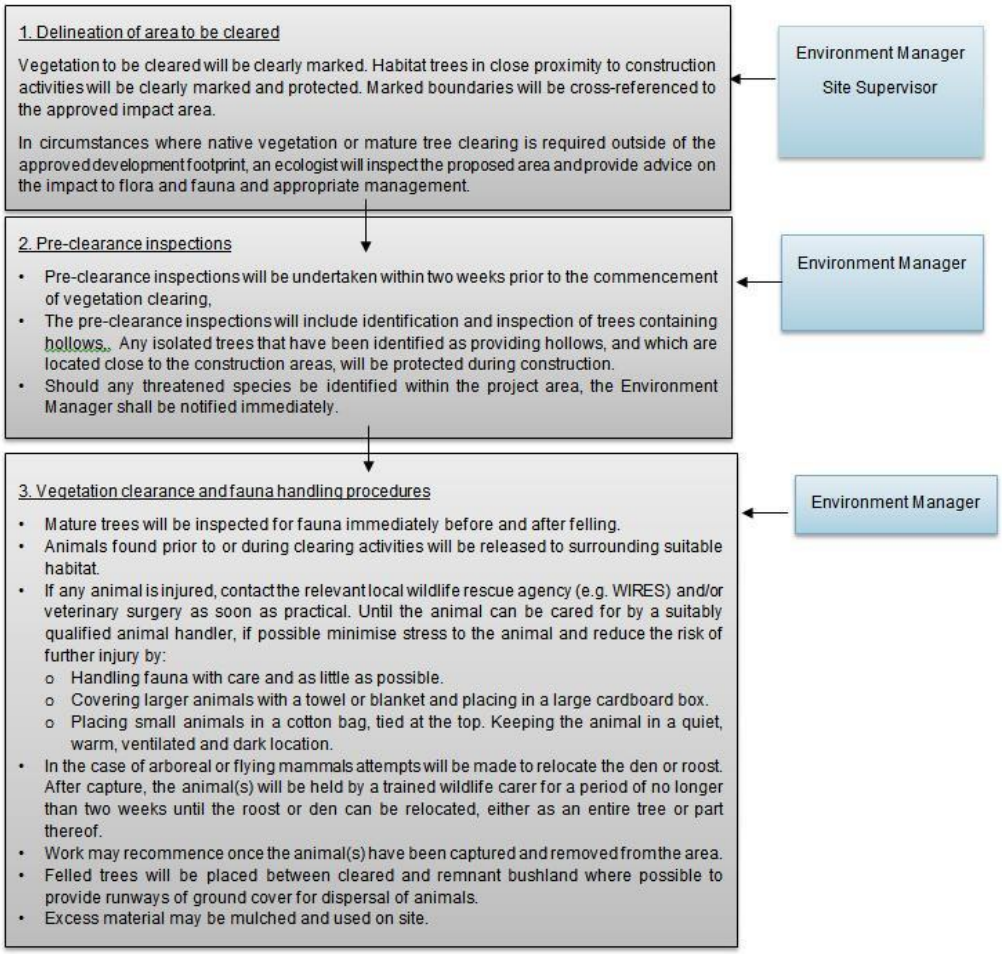
Mitigation Measure	Applicable to the Project	Responsibility
Environmental Performance Outcome (EPO) Biodiversity 1 - The project is designed to minimise impacts on biodiversity. Where practicable, the design minimises the need to clear vegetation.	Applicable	Environmental Manager Design Manager
EPO Biodiversity 2 - Potential impacts on biodiversity are managed in accordance with relevant legislation, including the EP&A Act, BC Act, EPBC Act, and the *Noxious Weeds Act 1993.*	Applicable	Environmental Manager Construction Manager Site Supervisor
EPO Biodiversity 3 – The biodiversity outcome is consistent with the *Framework for Biodiversity Assessment* (OEH, 2014a).	Applicable	Environmental Manager Construction Manager Site Supervisor
EPO Biodiversity 4 - Offsets are provided in accordance with the NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014).	Applicable	Environmental Manager Construction Manager
REMM B1 - Detailed design and Construction planning would avoid direct impacts to vegetation mapped as threatened ecological communities or native plant community types, specifically Downy Wattle Turpentine - Grey Ironbark open forest on shale, Degraded Turpentine - Grey Ironbark open forest on shale and Broad-leaved Ironbark – Grey Box.	Applicable	Environmental Manager Design Manager Construction Manager Site Supervisor
REMM B2 - Pre-clearing surveys and inspections for endangered and threatened flora and fauna species would be undertaken by qualified ecologists prior to any clearing occurring. The surveys and inspections, and any subsequent relocation of species, would be undertaken in accordance with the measures provided in the biodiversity assessment report.	Applicable	Environmental Manager Construction Manager Site Supervisor
REMM B3 - Areas of biodiversity value outside the project area would be marked on plans, and fenced or signposted where practicable, to prevent unnecessary disturbance.	Applicable	Environmental Manager Construction Manager Site Supervisor
REMM B4 - Impacts to Downy Wattle Turpentine - Grey Ironbark open forest on shale, Degraded Turpentine – Grey Ironbark open forest on shale and Broad-leaved Ironbark – Grey Box would be avoided. The locations of these species and communities would be marked on plans, fenced on site, and avoided.	Applicable	Environmental Manager Construction Manager Site Supervisor
REMM B5 - Equipment storage and stockpiling would be restricted to identified compound sites and already cleared land.	Applicable	Environmental Manager Construction Manager Site Supervisor
REMM B6 - A trained ecologist would be present during the clearing of native vegetation or removal of potential fauna habitat to avoid impacts on resident fauna and to salvage habitat resources as far as is practicable.	Applicable	Environmental Manager Construction Manager Site Supervisor
REMM B7 - Priority weeds would be managed in accordance with the *Biosecurity Act 2015*. Weeds of national environmental significance would be	Applicable	Environmental Manager Construction Manager

managed in accordance with the Weeds of National Significance Weed Management Guide.		Site Supervisor
REMM LV4 - The management of trees during detailed design and construction planning would be guided by the project's Tree Management Strategy, which would be developed in consultation with councils and include consideration of relevant local plans and strategies. Where removal cannot be avoided, trees would be replaced in accordance with the Tree Management Strategy, including replacement of removed trees in a two for one ratio. Opportunities to retain and protect existing trees would be defined during detailed design and construction planning, in accordance with the project's Tree Management Strategy. The design would aim to reduce tree removal to the extent practicable, particularly where they contribute to screening vegetation or landscape character.	Applicable	Environmental Manager Construction Manager Site Supervisor
REMM LV12 - Trees to be retained would be protected prior to the commencement of construction in accordance with AS4970-2009 Protection of trees on development sites and the project's Tree Management Strategy. Any tree pruning would be undertaken in accordance with the project's Tree Management Strategy, guided by a tree report prepared by a qualified arborist.	Applicable	Environmental Manager Construction Manager Site Supervisor

Site Specific Mitigation & Control Measures developed as part of this CEMP:

Mitigation Measure	Responsible
The design will take into consideration the location of vegetation and will aim to minimise vegetation clearing, tree trimming and tree removal, particularly in relation to threatened plant species, threatened vegetation communities and habitat resources. Appropriate justification will be provided for impacts to trees within the Tree Report	Design Manager Environmental Manager
A Tree Report is to be produced by a qualified arborist in consultation with the design team and Environmental Manager.	Environmental Manager Construction Manager
Appropriately trained and qualified tree removal contractors to be used.	Construction Manager Site Supervisor
Awareness training in the need to preserve vegetation to be retained.	Environmental Manager Construction Manager
Provide barricading or other suitable protection measures for trees to be retained	Construction Manager Site Supervisor
Biodiversity offsetting will occur in accordance with CoA E3 where impacts to threatened ecological communities or endangered species cannot be avoided.	Environmental Manager
Where required in accordance with the design some trees will be removed and offset in accordance with requirements of CoA E4 and CoA E6.	Environmental Manager Site Supervisor

If native fauna is identified within the disturbance footprint, the Principal Contractor's Environmental Manager will be contacted immediately. All necessary steps to minimise harm and mortality to such animals is required.	Construction Manager Site Supervisor
Open excavations and storage areas to be inspected regularly for the presence of fauna species.	Site Supervisor
No clearing or vegetation removal to occur without approval.	Environmental Manager Construction Manager Site Supervisor
All vegetation to be retained shall be protected and demarcated. These areas will be highlighted on the Environmental Control Maps. The clearing limits and protected vegetation is to be clearly communicated to site personnel during site inductions and toolbox talks.	Environmental Manager Construction Manager Site Supervisor
Works will only be undertaken in designated areas.	Construction Manager Site Supervisor
The Principal Contractor will identify and remove any weeds within their work area. Any weeds will be lawfully disposed of to a licenced facility.	Environmental Manager Construction Manager Site Supervisor
Segregate weed impacted waste material and dispose of to a licenced facility.	Construction Manager Site Supervisor
Inspect plant and machinery before entering and leaving worksite to ensure no dirt remains as it may cause weeds to spread.	Construction Manager Site Supervisor
Educate work force on common weeds within Bankstown rail corridor.	Environmental Manager
Plant and equipment brought on to site must be cleaned and free of deleterious material, mud and other material that may harbour weed seeds.	Site Supervisor
Construction plant, equipment and materials are not to be stored within the dripline of any trees or vegetation to be retained.	Construction Manager Site Supervisor
The following clearing procedure will be implemented should additional clearing be required.	**See flow chart**

	
Timeframe	Duration of the works.
Monitoring & Reporting	Tree Report Weekly inspections

	Vegetation Removal or Trimming Permits Pre-clearance inspections Daily Clearance reports			
Potential impacts and Residual Risk Rating Refer to Appendix 3 for Risk Matrix	**Potential impact**	Residual Risk Rating		
		P X	C	Risk
	Death or injury of fauna	L5	C3	13
	Unapproved damage or removal to threatened plant species, threatened vegetation community or habitat resources	L5	C3	13
	Unapproved removal or trimming of vegetation	L5	C5	4

In addition to the above table and to comply with the Downer EMS, the following controls will be applied in the case of unexpected discoveries which may require sensitive management.

The following are critical controls to prevent the unauthorised clearance of protected areas:

- Ensure an authorisation has been received prior to disturbing land or vegetation in accordance with the CoA, REMMS and Downer Land and Vegetation Disturbance Permit: DG-ZH-FM071.3
- Restrict access to protected areas with high visibility barriers and signage and include a buffer zone between the barrier and the protected fauna and flora area
- Restrict vehicle and equipment movement to designated access tracks

The following are general flora, fauna and biosecurity controls / mitigation measures:

- All activities must be conducted with minimum disruption to the natural habitat including the removal of rocks, debris or fallen branches on the land surface in order to prevent habitat loss.
- All clearing of vegetation must be kept to a minimum and only be removed with the required approval or permit.
- High visibility barriers and appropriate signage must be installed around protected or sensitive areas and monitored / maintained appropriately
    - include a buffer zone between the barrier and the protected fauna and flora area
    - communicate the restricted barriers locations to all staff; and
    - visually inspect and maintain barriers for duration of works.
- The establishment of access points, parking areas and temporary laydown areas should be determined early to minimise impact.
- Tracks should be maintained to prevent erosion, weed growth and waterlogging, to discourage drivers from driving off track.
- Type and size of the machinery required should be appropriate to the job and selected to minimise disturbance.

- Materials should be placed on established lay down areas.
- No spoil or stockpiles are to be placed on native vegetation.
- Ensure all open excavations (e.g. trenches) are visually inspected daily for any trapped fauna.
- On open excavations that will remain open overnight or for longer than 24 hours, install at least one (1) fauna escape ramp (e.g. scramble matting, ramps, ladders, battered slopes).
- Personnel are not permitted to intentionally feed, harass, harm, injure or kill fauna.
- Fauna must only be handled by approved and appropriately trained fauna handlers.
- All plant/ vehicles must be operated to minimise disturbance and spread of any weeds or pests.

Weed management –

Weeds need to be managed in accordance with the managed in accordance with section 11.2 of SM CEMF to avoid the spread of weeds through the environment. Weed management is to be undertaken in areas affected by construction prior to any clearing works in accordance with the Noxious Weeds Act 1993.

Weed prevention controls include:

- Ensuring plant, equipment and clothing are free of soil and vegetative matter prior to entry to site
- Minimising disturbance of native vegetation
- Ensure erosion controls are in place
- Apply mulch and revegetate as soon as practical.

Weed management:

- Weed removal in accordance with TfNSW approvals requires placing the weed waste in bags or on plastic sheeting to avoid the spread
- Physically demarcate weed trees/area on site of potential clearing or disturbance
- Weed material needs to be removed from site, preferably the same day
- Weed material must not be mulched on site and must only be taken to suitably licenced disposal facilities
- Areas that have had weeds removed need to be stabilised with mulch, biodegrable weed matting or similar.

Tree Protection Zone (TPZ)

Tree protection zones shall be managed in accordance with TfNSW Vegetation Management (Protection and Removal) Guideline - DMS-SD-111.

The project's direct scope of works area has been identified as highly modified urban landscape with no risk for direct or indirect impacts. However, with the completion of Landscaping, TPZs and associated controls will be applied.

A TPZ provides for the viability and stability of trees to be retained by excluding activities within the TPZ unless under authorisation from a qualified ecologist, horticulturalist or arborist.

Activities not to be undertaken in a TPZ without authorisation must include, but are not limited to:

- machine excavation and trenching
- cultivation
- storage, including vehicle and plant parking (unless no alternative exists when carrying out short term work)
- preparation of chemicals, including refuelling
- storage or placement of waste
- wash down and cleaning of equipment
- changing soil levels including placement of spoil
- installation of utilities.

Procedure 2: Groundwater

Impact: There is some potential for Construction activities to intersect the groundwater table

<table>
<tr><td>Objective</td><td colspan="4">• To comply with contractual and legislative requirements in relations to the management of groundwater
• Reduce the potential for drawdown of surrounding groundwater resources
• Prevent the pollution of groundwater through appropriate controls
• Reduce the potential impacts of groundwater dependant ecosystems</td></tr>
<tr><td>Targets</td><td colspan="4">All groundwater to be tested before dewatering occurs</td></tr>
<tr><td>Legal, Contractual & Other Requirements</td><td colspan="4">• Planning consent conditions – SSI 8256
• CEMF Section 7
• Water Management Act 2000
• NSW Aquifer Interference Policy (NSW Office of Water, 2012)
• Protection of the Environment Operations Act 1997</td></tr>
<tr><td>Site specific planning / approval conditions / licence conditions</td><td colspan="4">In accordance with the Sydney Metro City & Southwest –Sydenham to Bankstown Staging Report the Project does not require a specific Groundwater Management Plan as the likelihood of impacting on groundwater during the works are low. As such, management of any groundwater encountered during the works is to be managed in accordance with this procedure.</td></tr>
<tr><td rowspan="2">Potential impacts and Initial Risk Rating
Refer to Appendix 3 for Risk Matrix</td><td rowspan="2">Potential impact</td><td colspan="3">Initial Risk Rating</td></tr>
<tr><td>P X</td><td>C</td><td>Risk</td></tr>
<tr><td></td><td>Inappropriate dewatering of groundwater impacting on receiving environment or groundwater source</td><td>L4</td><td>C5</td><td>7</td></tr>
<tr><td>Controls (means and resources)</td><td colspan="4">Commitments & Mitigation Measures outlined in the EIS / SPIR
<table>
<tr><th>Mitigation Measure</th><th>Applicable to the Project</th><th>Responsible</th></tr>
<tr><td>N/A</td><td>N/A</td><td>N/A</td></tr>
</table>
Site Specific Mitigation & Control Measures developed as part of this CEMP:
<table>
<tr><th>Mitigation Measure</th><th>Responsible</th></tr>
<tr><td>A dewatering permit is to be in place for all dewatering activities, including the dewatering of any groundwater.</td><td>Environmental Manager
Site Supervisor</td></tr>
</table></td></tr>
</table>

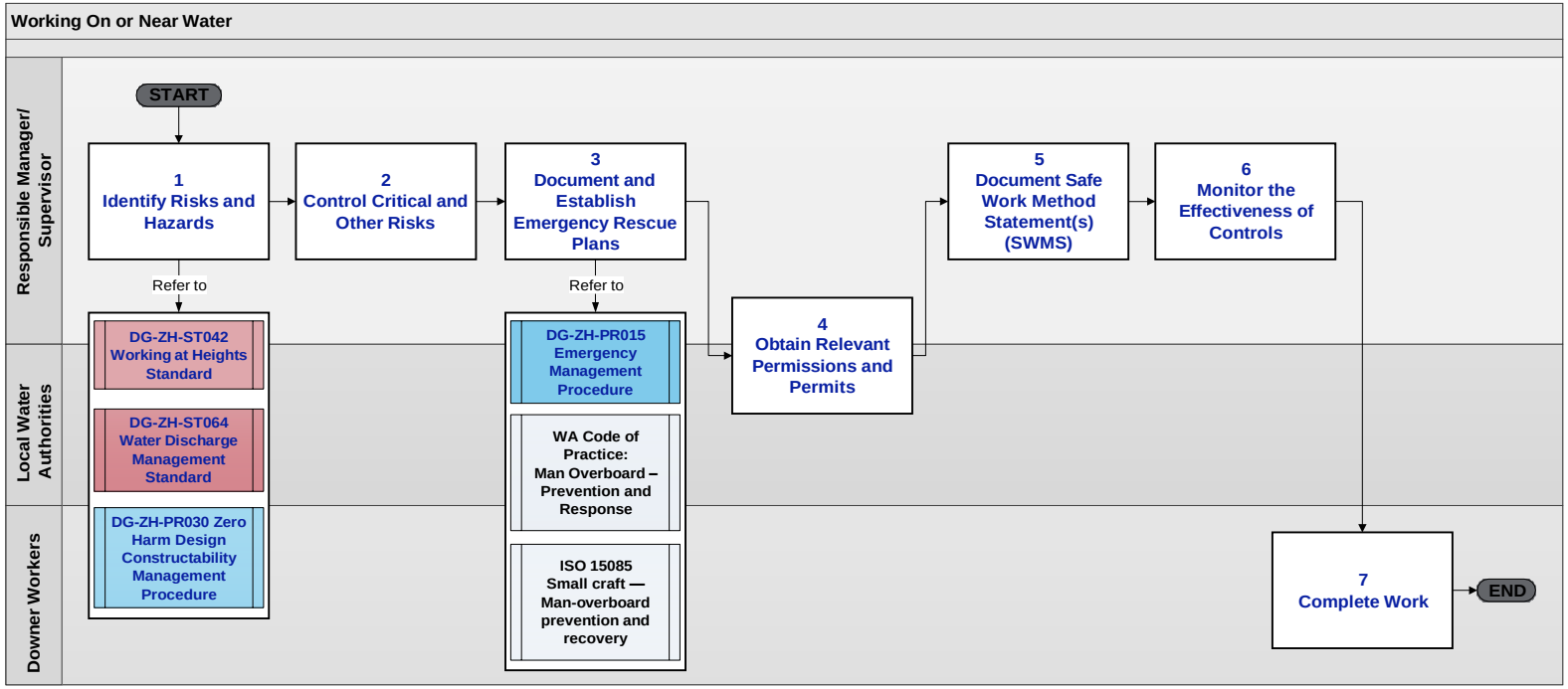
		Awareness training is to be provided to workers as required.	Environmental Manager Site Supervisor
		Water treatment units are to be utilised and maintained where water testing indicates treatment is required.	Environmental Manager Construction Manager Site Supervisor
		Dewatering may only occur on site or to licenced discharge points	Environmental Manager Construction Manager Site Supervisor

Responsibilities	• Engineering personnel are responsible for identifying any works that may interact with known groundwater sources • Engineering personnel are responsible for determining any potential subsidence impacts associated with dewatering of groundwater • The Principal Contractor's Environmental Manager is to organise testing of any groundwater prior to discharge • Engineering personnel are responsible for implementing appropriate treatment methods based on the results of groundwater quality testing			
Timeframe	Duration of Construction			
Monitoring and Reporting	• Dewatering permit • Weekly inspections • Inspection and maintenance of treatment units (where applicable) • Incidents are to be recorded on form Environmental Incident and Complaint Report			
Potential impacts and Residual Risk Rating Refer to Appendix 3 for Risk Matrix	**Potential impact**	Residual Risk Rating		
		P X	C	Risk
	Inappropriate dewatering of groundwater impacting on receiving environment or groundwater source	L5	C5	4

As stated in the table above, the project does not require a specific Groundwater Management Plan as the likelihood of impacting on groundwater during the works are low. As such, management of any groundwater encountered during the works is to be managed in accordance with Section 7 of SM CEMF:

- Any groundwater discharge will be managed in accordance with the Sydney Metro – Water Discharge or Reuse Procedure, the Southwest Metro – Dulwich Hill, Campsie and Punchbowl Station Upgrades Soil and Water Management Plan and Downer's Water Discharge Management Standard (DG-ZH-ST064):
    - For water release from sediment ponds, trenches, excavations and bunds a water release permit using Downer's Water Release Permit (DG-ZH-FM064.1) will be issued prior to any manual water release.
    - In the absence of discharge locations, an appropriate disposal method and location based on the results of analysis, that prevents pollution of local and regional groundwater and surface water resources, is to be selected in consultation with Sydney Metro and/ or regulator.

- Follow the flowchart – Downer's Working On or Near Water Procedure (DG-ZH-PR136)



Procedure 3: Air Quality

Impact: Minimal impact expected due to the small area of disturbance associated with the works.

<table>
<tr><td>Objectives</td><td colspan="4">• To comply with contractual and legislative requirements in relations to the management of air quality
• Minimise gaseous and particulate pollutant emissions from Construction activities as far as feasible and reasonable
• Identify and control potential dust and air pollution sources.</td></tr>
<tr><td>Targets</td><td colspan="4">• No dust impacting on offsite activities or surrounding residences
• No release of contaminants, (odour, smoke etc.) into the air.</td></tr>
<tr><td>Legal, Contractual and Other Requirements</td><td colspan="4">• Planning consent conditions – SSI 8256
• CEMF Section 16
• Protection of the Environment Operations Act 1997
• Protection of the Environment Operations (Clean Air) Regulation 2010</td></tr>
<tr><td>Site specific planning / approval conditions / licence conditions</td><td colspan="4">• CoA E2
• Mitigation measures committed in the EIS & SPIR</td></tr>
<tr><td rowspan="4">Potential impacts and Initial Risk Rating
Refer to Appendix 3 for Risk Matrix</td><td rowspan="2">Potential impact</td><td colspan="3">Initial Risk Rating</td></tr>
<tr><td>P X</td><td>C</td><td>Risk</td></tr>
<tr><td>Dust or plant emission impacting on the receiving environment and human health</td><td>L3</td><td>C5</td><td>12</td></tr>
<tr><td>Abrasive blasting waste emissions impacting on the receiving environment and human health</td><td>L3</td><td>C4</td><td>16</td></tr>
<tr><td>Odour from works causing disturbance to local receivers</td><td>L4</td><td>C5</td><td>7</td></tr>
<tr><td>Controls (means and resources)</td><td colspan="4">Commitments & Mitigation Measures outlined in the EIS / SPIR
<table>
<tr><th>Mitigation Measure</th><th>Applicable to the Project</th><th>Responsible</th></tr>
<tr><td>CoA E2 - In addition to the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1, all reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during the Construction and Operation of the CSSI.</td><td>Applicable</td><td>Environmental Manager
Construction Manager
Site Supervisor</td></tr>
</table>
Site Specific Mitigation & Control Measures developed as part of this CEMP:
The following are the minimum general control measures to be implemented on the project, however additional control measures may be required following the completion of the Construction process procedure/work method statement for the proposed activity.
<table>
<tr><th>Mitigation Measures</th><th>Responsible</th></tr>
</table></td></tr>
</table>

	All plant and machinery would be fitted with emission control devices complying with relevant Australian Standards.	Construction Manager Site Supervisor
	Machinery would be turned off when not in use and not left to idle for prolonged periods.	Site Supervisor
	Machinery and plant that will be kept on site will be serviced as per manufactures specifications.	Site Supervisor
	Vehicle movements would be limited to designed entries and exits, haulage routes and parking areas.	Construction Manager Site Supervisor
	Dust generation would be monitored visually, and where required, dust control measures such as water spraying would be implemented to control the generation of dust.	Environmental Manager Site Supervisor
	Materials transported to and from the site would be covered to reduce dust generation in transit.	Site Supervisor
	Access points would be inspected to determine whether sediment is being transferred to the surrounding road network. If required, sediment would be promptly removed from roads to minimise dust generation.	Environmental Manager Site Supervisor
	Provide shaker grids, rumble strip or equivalent stabilisation at site egress points.	Site Supervisor
	Remove mud from haul vehicles prior to entering public roads.	Site Supervisor
	Stabilisation of any exposed surfaces as soon as practicable, including implementation of final landscaping as early as possible.	Construction Manager Site Supervisor
	Shade cloth would be fastened to the perimeter fence on the project site, where practicable, to minimise dust transported from the site during Construction.	Construction Manager Site Supervisor
	Daily inspections and regular surveillance would be undertaken to identify any vehicles, plant or equipment that is causing visible emissions. If any defective vehicles, plants or equipment are identified, operation of this machinery would cease, and service/maintenance would be undertaken.	Site Supervisor
	Works (including the spraying of paint and other materials) would be suspended during strong winds or in weather conditions where high levels of dust or airborne particulates are likely.	Construction Manager Site Supervisor
	Stockpiles will be maintained and contained appropriately, which could include covering or regular watering to minimise dust.	Construction Manager Site Supervisor
	Provision of Water tankers where necessary.	Construction Manager Site Supervisor

	Cover haul vehicles loads & ensure tail gates are closed when operating on public roads.	Construction Manager Site Supervisor		
	Provide awareness training in the need to minimise dust.	Environmental Manager		
	Note any odours during site inspections, particularly from any effluent tanks, and apply de-odourising agents as required.	Environmental Manager Construction Manager Site Supervisor		
Responsibilities	• The Site Manager to implement the requirements of this procedure • Site Manager and Environmental Manager (or delegate) are to inspect the works at regular intervals.			
Timeframe	Duration of Construction			
Monitoring and Reporting	• Weekly inspections. Incidents or complaints to be recorded on form Environmental Incident and Complaint Report			
Potential impacts and Residual Risk Rating Refer to Appendix 3 for Risk Matrix	**Potential impact**	Residual Risk Rating		
		P X	C	Risk
	Dust or plant emission impacting on the receiving environment and human health	L4	C5	7
	Abrasive blasting waste emissions impacting on the receiving environment and human health	L4	C4	7
	Odour from works causing disturbance to local receivers	L5	C5	4

In addition to the above table and to comply with the Downer EMS, Downer's Air Quality Management Standard (DG-ZH-ST070) defines the requirements to be met to manage air emissions from all activities conducted at fixed facilities and construction worksites. Discharges to air such as fumes, dust and odour can contaminate the environment and be a nuisance to communities and animals.

Downer will take all reasonable and practicable measures to manage air emissions from all activities conducted on site. Controls for emissions to air will be addressed using the following hierarchy.

Table 7. Hierarchy of air quality management controls

Control Hierarchy	Example
Avoid	During the design and planning phase, eliminate the need for high dust generating activities. Using technology that avoids or minimises air emissions (i.e. newer plant)
Reduce	Treating air emissions before release / utilising water misters and dust suppression techniques to suppress dust and or bind it.
Manage	Limiting dust-generating construction activities during windy conditions. Monitoring emissions for changing conditions during works.

Diesel exhaust and emissions will be managed with proper maintenance and tuning of engines to manufacturer's specifications. This includes Catalytic converters and exhaust filters; Correct fuel specification; Limiting idling time; Avoiding overloading; Appropriate height of discharge above ground level, Vehicles operated in accordance with Downer's Vehicles and Mobile Plant Standard (DG-ZH-ST057).

Procedure 4: Waste and Spoil

Impact: Minimal impact expected due to the small amount of waste generated and spoil to be handled.

<table>
<tr><td>Objectives</td><td colspan="4">• Minimise spoil generation where possible
• The project will mandate 100% reuse or recycling (on or off site) of usable spoil
• Spoil will be managed with consideration to minimising adverse traffic related issues
• Spoil will be managed to avoid contamination of land or water
• Spoil will be managed with consideration of the impacts on residents and other sensitive receivers
• Site contamination will be effectively managed to limit the potential risk to human health and the environment
• Minimise waste throughout the project life cycle
• Waste management strategies will be implemented in accordance with the Waste Avoidance and Resource Recovery Act 2001 management hierarchy as follows:
○ Avoidance of unnecessary resource consumption
○ Resource recovery (including reuse, reprocessing, recycling and energy recovery)
○ Disposal.</td></tr>
<tr><td>Targets</td><td colspan="4">• 100% reuse or recycling of usable spoil.
• 90% recycling target (in accordance with REMM WM2)
• Waste tracking to occur throughout project and records to be maintained
• The principles of the waste management hierarchy will be adopted.</td></tr>
<tr><td>Legal, Contractual and Other Requirements</td><td colspan="4">• Planning consent conditions – SSI 8256, CoA C3(c)
• CEMF Section 6 and Section 17
• Protection of the Environment Operations Act 1997
• Protection of the Environment Operations (Waste) Regulation 2014</td></tr>
<tr><td>Site specific planning / approval conditions / licence conditions</td><td colspan="4">CoA – E73 to E76
REMM – WM1 to WM7
Mitigation measures committed in the EIS & SPIR</td></tr>
<tr><td rowspan="2">Potential impacts and Initial Risk Rating
Refer to Appendix 3 for Risk Matrix</td><td>Potential impact</td><td colspan="3">Initial Risk Rating</td></tr>
<tr><td></td><td>P X</td><td>C</td><td>Risk</td></tr>
<tr><td></td><td>Inappropriate waste disposal impacting on environmental receivers</td><td>L3</td><td>C5</td><td>12</td></tr>
<tr><td>Controls (means and resources)</td><td colspan="4">Commitments & Mitigation Measures outlined in the EIS / SPIR
<table><tr><th>Mitigation Measure</th><th>Applicable to Project Locality</th><th>Responsible</th></tr></table></td></tr>
</table>

	CoA E73 - Any items or infrastructure that are salvageable must be identified in the relevant CEMP Sub-plan (Condition C3). Note: reuse of items may include signal boxes, indicators, ballast or other rail infrastructure. These items should be offered to Sydney Trains or reuse.	Applicable	Construction Manager Site Supervisor
	CoA E74 - The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the *Protection of the Environment Operations Act 1997*, under the *Protection of the Environment Operations (Waste) Regulation 2014*, and orders or exemptions made under the regulation.	Applicable	Environmental Manager Construction Manager Site Supervisor
	CoA E75 - Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the *Protection of the Environment Operations (Waste) Regulation 2014*, or to any other place that can lawfully accept such waste.	Applicable	Environmental Manager Construction Manager Site Supervisor
	CoA E76 - All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	Applicable	Environmental Manager Construction Manager Site Supervisor
	REMM WM1 - Detailed design would include measures to minimise excess spoil generation. This would include a focus on optimising the design to minimise spoil volumes, and the reuse of material on-site.	Applicable	Design Manager Sustainability Manager Environmental Manager Construction Manager
	REMM WM2 - A recycling target of at least 90 per cent would be adopted.	Applicable	Sustainability Manager Environmental Manager Construction Manager Site Supervisor
	REMM WM3 - Spoil would be managed in accordance with the spoil management hierarchy.	Applicable	Sustainability Manager Environmental Manager Construction Manager Site Supervisor
	REMM WM4 - Target 100 per cent reuse of reusable spoil.	Applicable	Sustainability Manager Environmental Manager Construction Manager Site Supervisor

REMM WM5 - Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging.	Applicable	Sustainability Manager Environmental Manager Construction Manager Site Supervisor
REMM WM6 - All waste would be assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).	Applicable	Environmental Manager Construction Manager Site Supervisor
REMM WM7 - Waste segregation bins would be located at various locations within the project area, if space permits, to facilitate segregation and prevent cross contamination.	Applicable	Sustainability Manager Environmental Manager Construction Manager Site Supervisor

Site Specific Mitigation & Control Measures developed as part of this CEMP:

The following are the minimum general control measures to be implemented on the project, however additional control measures may be required following the completion of the Construction process procedure/work method statement for the proposed activity.

Mitigation Measures	Responsible
Minimise spoil generation where possible by undertaking a cut/fill balance exercise	Construction Manager Site Supervisor
Minimise spoil generation where possible by not over-excavating	Construction Manager Site Supervisor
Minimising adverse traffic related issues associated with spoil movement by primarily keeping any movements to within the corridor and by only using approved haulage routes under the Construction Traffic Management Plan	Construction Manager Site Supervisor
Spoil will be managed to avoid contamination of land or water by segregating soils known to contain contaminants	Environmental Manager Construction Manager Site Supervisor
Spoil will be managed to avoid contamination of land or water by implementing appropriate erosion and sedimentation controls, in particular by covering stockpiles where practicable	Environmental Manager Construction Manager Site Supervisor

	Spoil will be managed to avoid contamination of land or water by avoiding overland flow paths and known flood zones as storage areas	Environmental Manager Construction Manager Site Supervisor
	Spoil will be managed with consideration of the impacts on residents and other sensitive receivers by selecting laydown areas that are as far away from receivers as possible	Environmental Manager Construction Manager Site Supervisor
	Spoil will be managed with consideration of the impacts on residents and other sensitive receivers by using approved haulage routes under the Construction Traffic Management Plan	Construction Manager Site Supervisor
	Site contamination will be effectively managed to limit the potential risk to human health and the environment by segregating contaminated spoil	Environmental Manager Construction Manager Site Supervisor
	Site contamination will be effectively managed to limit the potential risk to human health and the environment by implementing the unexpected contamination finds procedure (refer to Appendix B of the SWMP).	Environmental Manager Construction Manager Site Supervisor
	Implement the mitigation measures within the Soil and Water Management Plan and other procedures within this CEMP.	Environmental Manager Construction Manager Site Supervisor
	Maintain a waste tracking register, including a copy of all waste dockets	Sustainability Manager
	Waste will be lawfully disposed of to a licenced facility	Environmental Manager Construction Manager Site Supervisor
	Any materials sent from the Project sites to another project site will comply with the NSW EPA Resource Recovery Exemptions. Appropriate testing and reporting in accordance with the Resource Recovery Exemption will be undertaken by an Environmental Consultant. All records will be kept on file and provided to the receiver.	Environmental Manager Construction Manager
	A spoil import and export form will be completed for any spoil coming to and leaving from the site.	Environmental Manager Construction Manager
Responsibilities	• The Site Manager to implement the requirements of this procedure. • Site Manager and Environmental Manager (or delegate) are to inspect the works at regular intervals.	
Timeframe	• Duration of Construction until all Principal Contractor waste obligations are met	

Monitoring and Reporting	• Skips monitored visually by the Site Manager on a daily basis. • Weekly inspections. • Incidents or complaints to be recorded on form Environmental Incident and Complaint Report • Waste disposal records to be recorded in Principal Contractor's Waste Register.			
Potential impacts and Residual Risk Rating Refer to Appendix 3 for Risk Matrix	**Potential impact**	Residual Risk Rating		
		P X	C	Risk
	Inappropriate waste disposal impacting on environmental receivers	L4	C5	7

In addition to the above table and to comply with the Downer EMS, Waste and Spoil will be managed in accordance with Downer's 10 Environmental Principles (DG-ZH-PN002) of which the following are relevant:

- EP4 – Store and secure chemical substances in a bunded area;
- EP5 – Reduce, Reuse, Recycle to minimise waste;
- EP9 – Report all environmental hazards and incidents; and
- EP10 – Keep every site, secure, tidy and housekeeping maintained

Downer's Waste Management Standard (DG-ZH-ST063) applies to the identification and management of waste in accordance with the Waste Hierarchy with the aim of creating a circular economy encouraging life cycle thinking.

For job specific tasks refer to the following Zero Harm compliance guidelines:

- Management of Waste (DG-ZH-CG063);
- Waste Minimisation (DG-ZH-CG064);
- Re-use and Recycling (DG-ZH-CG065); and
- Waste Treatment (DG-ZH-CG066).

All waste streams must be segregated and classified in accordance with relevant jurisdiction regulations and guidelines. In some instances, chemical analysis will be required to determine the classification of the waste, e.g. asbestos contained in fill material. For further information refer to Downer's Fill Material Management Standard (DG-ZH-ST068.1) and Downer's Asbestos Management Standard (DG-ZH-ST086).

The management of waste must be accordance with the waste management hierarchy.

Before commencing any work, determine the sources of waste and management requirements and include them as part of the Project's Work Health and Safety (Zero Harm) Management Plan and or referenced within Appendix E of this CEMP.

Basic information to consider includes:

- identification and classification of all waste streams
- assessment of waste streams based on the waste hierarchy
- estimation of waste types and quantities to be generated, optionally using DG-ZH-FM063.2 Waste Estimation Record to record this data
- waste segregation, handling and storage arrangements
- waste transport methods and disposal locations
- permits/ licences required to store, transport or dispose of waste; and
- regulated waste transporters and receiving facilities licenses.

Downer reports and captures waste data into the Downer Environmental Data Reporting System (Envizi). This information can be recorded by completing Downer's Envizi Facility Details Record (DG-ZH-FM077.1) and submitting to an authorised person who can enter the data into Envizi.

Appendix F: Sydney Metro Environmental Incident and Non-compliance Reporting Procedure

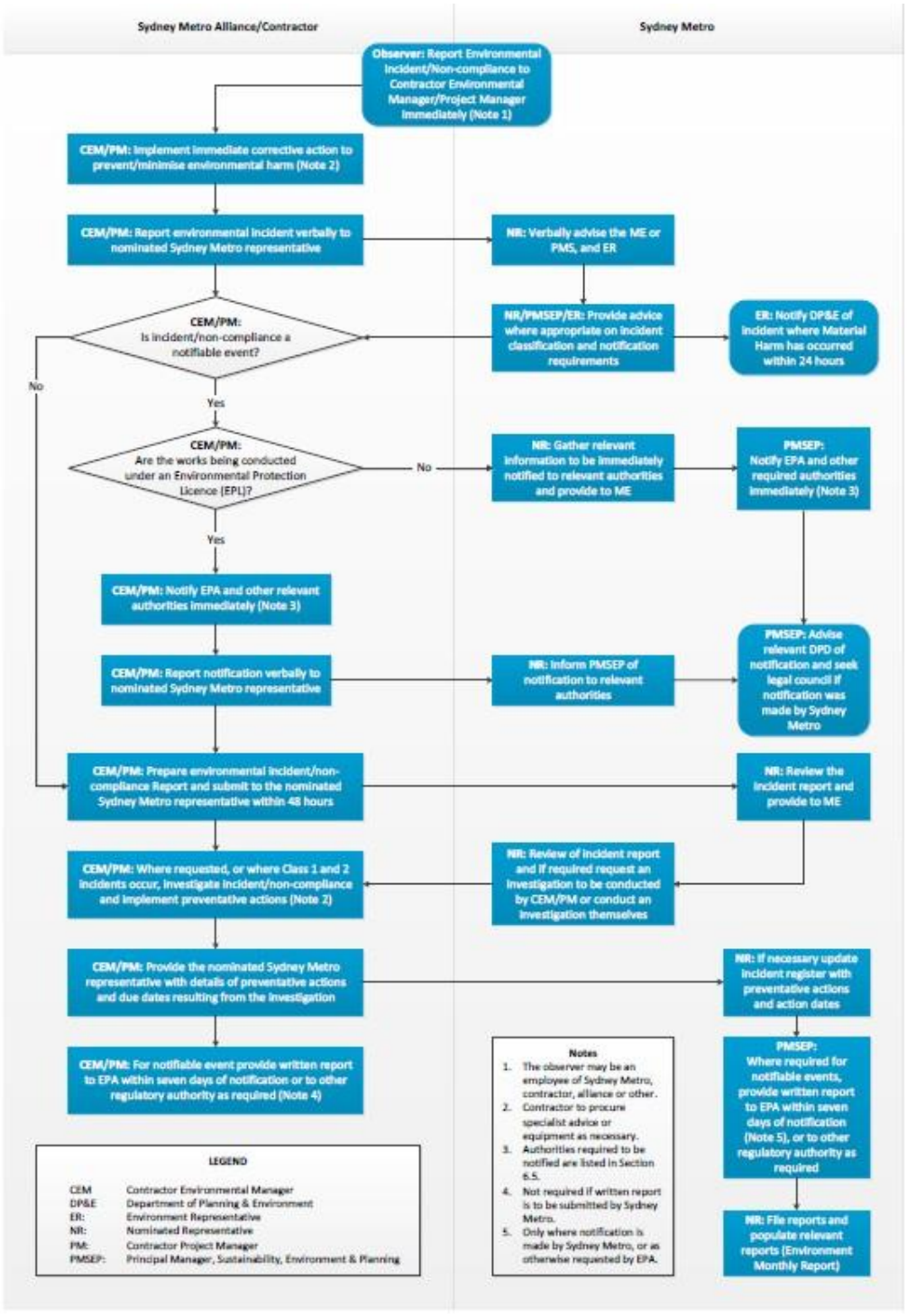
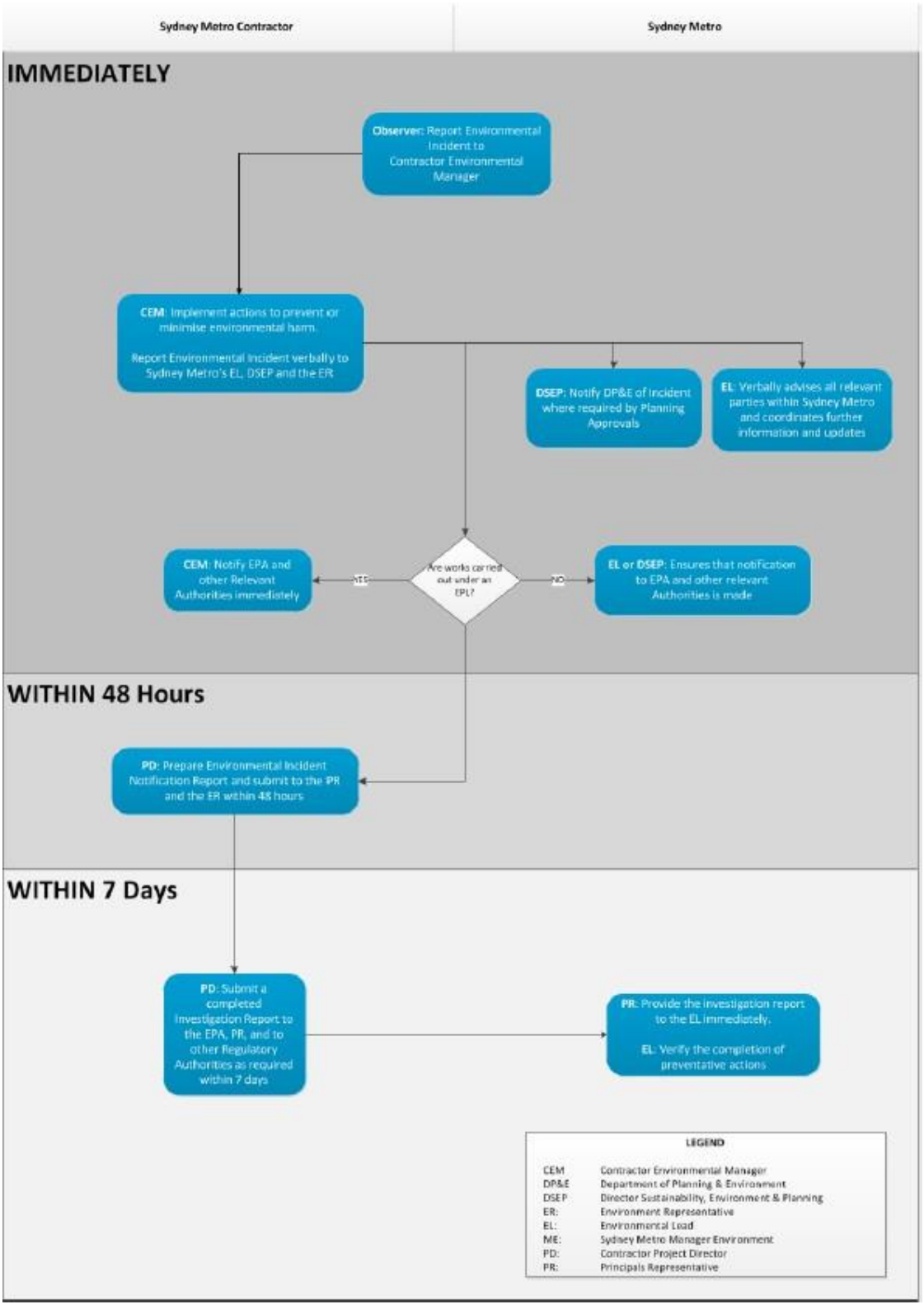


Figure 1: Environment Incident Classification & Reporting Procedure overview

SM ES-PW-303 Environmental Incident Classification & Reporting Procedure - App 3
Page 5 of 12

Appendix F(a): Sydney Metro Environmental Incident Notification Process for Class 1 and 2 Incidents



Appendix F(b): Sydney Metro Environmental Incident and Non-Compliance Report Template

Environmental Incident and Non-compliance Notification Report

Record only factual information that you know to be correct. Do not make assumptions, be succinct and avoid speculation.

Section 1: General Details				
Contractor:				
Site:				
Sydney Metro ID Code: (If known)		Contractor Reference ID: (If known)		
Date of Incident or Non-compliance:		Time of Incident or Non-compliance:		
Date of notification:		Time of notification:		
Method of notification:				
Notification received by: (Name)				
Notification received by: (Position)				
Event Classification:	☐ Non-compliance (complete Sections 6 & 7 only)	☐ Class 3	☐ Class 2	☐ Class 1
Probable Impact Duration	☐ Short term (less than 1 week)	☐ Medium term (less than 3 months)	☐ Long term (greater than 3 months)	☐ Permanent
Incident Properties: (Tick as many as appropriate, where significant off-site impacts on people or the biophysical environment occurs this incident is also notifiable to DPIE)		☐ Notifiable event (also complete Section 4)		
		☐ Environmental Requirements Breached (also complete Section 6)		

Incident type (choose one):		
☐ Air Quality (e.g. dust or odour emission, excessive exhaust from plant or equipment)	☐ Heritage (e.g. damage/disturbance to heritage item/object/place)	☐ Noise & Vibration (e.g. exceedances of noise and vibration limits)
☐ Flora and Fauna (damage/harm to species /habitat/ecological community)	☐ Spills and Leaks (e.g. escape of fluids from containers)	☐ Traffic, Transport & Access (e.g. Issues regarding the management of traffic flow)
☐ Soil and Water (events where harmful materials escape into soil or discharge to any onsite or offsite waterway)	☐ Community, Stakeholder and Business (e.g. events causing impacts on community amenity/property)	☐ Waste & Spoil (e.g. disposal causing environmental harm or improper stockpile management)
☐ Management Systems (e.g. Non-Compliance with project approval, or a CEMP requirement)		

Section 2: Circumstances and Corrective Actions	
Exact location: (address, chainage, nearest cross street, landmarks etc., attach sketch if appropriate.)	
Circumstances: (Outline the circumstances of the Incident leading up to the event and detail the activity being conducted)	
Corrective Actions: (Actions taken immediately to address the cause of environmental harm)	

Section 3: Other Relevant Information (pollution events only)			
Pollutant:			
Quantity or volume:		Concentration:	
Location of Pollution: (If different from the exact location of the event, also describing the extent of the pollution)			
Section 4: Notification to Relevant Authorities (notifiable events only)			
Relevant Authorities to be notified: (relevant information to be given in this notification is contained within this form)	Incident Observer immediate verbal notification made to: ☐ Sydney Metro Nominated Environmental Representative ☐ Principal Contractor's Environment Manager Sydney Metro Nominated Environmental Representative immediately notified: ☐ Local Authority (Council) ☐ EPA (through the Pollution Hotline on 131 555) ☐ Ministry of Health ☐ WorkCover Authority As soon as possible following immediate notification requirements: ☐ Department of Planning, Industry and Environment ☐ Independent Environmental Representative		
Relevant Authority Notification made by: (Name)			
Relevant Authority Notification made by: (Position)			
Date of notification:		Time of notification:	

Section 5: Incident Investigation Details			
Investigation Details: (Actions taken immediately to prevent or minimise environmental harm)			
Report Due Date	**Allocated to**	**Comments**	
Relevant approval(s):		**Relevant condition(s):**	
Action(s) required for closure: (Where an individual is assigned an action to close a Non-compliance they must notify the Nominated Environmental Representative once this is achieved)			
Assigned to:		**Status:**	☐ Open ☐ Close immediately
Section 6: Non-Compliance (leave blank if unsure)			
Description of non-compliance:			
Relevant approval(s):		**Relevant condition(s):**	
Action(s) required for closure: (Where an individual is assigned an action to close a Non-compliance they must notify the Nominated Environmental Representative once this is achieved)			
Assigned to:		**Status:**	☐ Open ☐ Close immediately
Section 7: Signoff			
Signature:			
Name:			
Position:			

Appendix G: Noise and Vibration Management Plan

Standalone sub plan – refer to document: SWM-DCP-NVMP-001 Noise and Vibration Management Plan

Appendix H: Soil and Water Management Plan

Standalone sub plan – refer to document: SWM-DCP-SWMP-001 Soil and Water Management Plan

Appendix I: Heritage Management Plan

Standalone sub plan – refer to document: SWM-DCP-HMP-001 Heritage Management Plan

Appendix J: Indicative Training Matrix

Training Needs Analysis - IP Template
Project No: 20041098 (South West Metro)

Project Director: Andrew Bedwani

Key	
	Mandatory
	Core Skills
	Suggested
X	Completed
E	Expired

Notes:
Corporate or Client mandatory competency skills requirements
Core skills required to be deemed competent in the chosen role
Suggested / Optional training to assist in the employees competency development.
Place an X in the boxes below if the competency skill (or equivalent competency skill) has been achieved by the Employee
Place an E in the boxes below if the employee's competency skill has expired. Remove the E once the competency skill has been re-achieved.

COMPETENCY SKILLS Downer - Training Needs Analysis	Method of delivery; Internal or External	Expiry	Training Provider	Cost	Reportable Training	First Aider	Mental Health First Aider	Chief Fire Warden	Fire Warden	D&A Testing Officer	General Manager	Operations Manager	Engineering Manager	Senior Project Manager	Project Manager	Project Manager	Project Manager	Project Engineer Level 1	Graduate Engineer (End	Graduate Engineer (End	Contracts Manager	Commercial Manager	Senior Contract	Contract Administrator	Contract Administrator	Contract Administrator	Procument Administrator	Site Administrator	Site Administrator	Regional Workforce Development Lead	Senior Cost Controller	Estimator	Claims Consultant	Document Controller	Supervisor	Supervisor	Supervisor	Utilities Infrastructure Manager	Site Engineer	Permit Officer (Testing and Commissioning)	Senior Environment and Sustainability Manager	Environment and Heritage Advisor	Environmental and Sustainability Advisor	Environmental and Sustainability Advisor	Environmental and Sustainability Advisor	Stakeholder and Community Liaison	Community Relations Trainee	Senior Zero Harm Advisor	Zero Harm Advisor	Rail Safety Advisor	Quality Manager	Quality Coordinator	Lead Planner	Possession Coordinator	Possession planning Administrator	Senior Systems Engineer	Junior Engineer - Systems Assurance
						Multiple Workers	Multiple Workers	NIL		Multiple Workers	NIL	NIL	NIL	Kristo Bugarija	Mitesh Patel	Paul Cejka	Jun Leon	Minh Ngo	Kyriakos Papadopoulos	Elizabeth Kalou	John Trimmer	Neil Fletcher	Peter West	Nathan Bucki	Anthony Thomson	Lakshmi Harikrishnan	Gavin Weir	Gloria Ng	Sonia Saldanha	Helen Chamney	Nia Posgate	Mitchell Main	Muhammed Farhan	Justin Fletcher	Alice Nguyen	Justin Turk	Justin Hatton	James Ward	Craig Humphreys	Sanjeevan Prabahar	Bradley Donovan	Amy Williams	Geraldine Figueira	Emma Rolls	Antoinette Irwin	Charlotte Vossenkuhl	Julie Henderson	Stacy Sung	Tom Simac	Keeley Markham	Steven Hayles	Luke Keerie	Ethan Guo	Joe Delamo	Shimona Rashi	Kam Kalia	Jase Berry	Shivani Dhandhukia
DOWNER INDUCTIONS																																																									
Corporate Inductions																																																									
Induction Module 02: Standards of Business Conduct	Internal	2 yrs	Downer - online	Nil										E	E	X	X	E	X	X	X	X	E	X	X	X	X	X	X	X	X	X	E	X	X	X	X	X	X	E	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Induction Module 03: Workplace Behaviour	Internal	2 yrs	Downer - online	Nil										E	E	X	X	E	X	X	X	X	E	X	X	X	X	X	E	X	X	X	E	X	X	X	X	X	X	E	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Induction Module: Zero Harm at Downer	Internal		Downer - online	Nil										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Induction Module: Security Awareness	Internal		Downer - online	Nil										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cyber Security at Downer	Internal		Downer - online	Nil										X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Delivery Management Methodology Induction (previously Project Management Induc	Internal		Downer - online	Nil										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Building Code 2016 - Managers and Supervisors	Internal		Downer - online	Nil										X		X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Building Code 2016 - Engaging Subcontractors	Internal		Downer - online	Nil										X	X	X	X				X		X		X			X		X				X	X				X																				
IP Anti-Bribery and Corruption	Internal		Downer - online	Nil										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	E	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Engaging Contractors at Downer	Internal		Downer - online	Nil											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Procurement Induction Module	Internal		Downer - online	Nil										X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Project Level Inductions																																																							
Project Induction	Internal		Downer - Face to Fac	Nil										?	?	?	?				X																																							
SAFETY TRAINING																																																									
Chief Fire Warden training	External		Fire and Safety Austra	$170	Y			X																																																		
Fire Warden training	External		Fire and Safety Austra	$215	Y				X																																															
First Aid - CPR	External	1 yr	St John Ambulance	$75	Y	X											E		E	E	E					E										E						E	E						X	X							
First Aid - Provide First Aid	External	3 yrs	St John Ambulance	$195	Y	X											X		X	X	E					E										X						X	E						X	X							
White Card	External		Various RTO's	$120	Y	X									X	X	X	X	X		X					X					X					X		X				X							X	X	X		X	X			X
Drug and Alcohol Testing	External		Drug & Alcohol Testing Institute	$650	Y					X																																																	
TLIF0006 – Administer fatigue risk management system	External		Various RTO's		Y																																																						
TLIF0009 – Ensure the safety of transport activities	External		Various RTO's		Y															X			X				X	X																					X	X						
TLIF0014 – Monitor the safety of transport activities	External		Various RTO's		Y																																																			
RAIL INDUSTRY WORKER																																																									
Rail Industry Worker Card	External	1 year	MTA	$170										E	E	X	X	X	X	X	E	E													X	X	X	X			X	X	X		X			X	X	X	X	X	X		X	X	X	X
TLIF2080/TLIF0020 - Safely Access the Rail Corridor	External		CERT	$215	Y									E	E	X	X	X	X	X	E	E													X	X	X	X			X	X	X		X			X	X	X	X	X	X		X	X		
Rail Category 3 Medical	External	Dependent on age	Workforce Health Assessors	$75										E	E	X	X	X	X	X	E	E													X	X	X	X			X	X	X		X			E		X	X	X	X		CAT 1	X		X
DOWNER INTERNAL PROGRAMS																																																							
Sustainability																																																							
Cultural Awareness Training (ICAT)	Internal		Downer - online	Nil										X		X	X	X	X	X	X		X		X		X	X					X							X		X				X	X	X	X	X	X		X			
Zero Harm																																																							
Mental Health First Aid	Internal	3 yrs	Downer	$400			X												X	X			X																																			
ICAM Lead Investigator	External		Safety Wise																								X																						X							
Crane and Lifting Training - Level 1: Lifting Fundamentals	Internal		Downer - online	Nil													X	X	X																X	X																			
Crane and Lifting Training - Level 2: Major Lifts	Internal		Downer - Face to Fac	Varies depending													X																																							
Crane and Lifting Training - Level 3: Critical Lifts	Internal		Downer - Face to Fac																																																				
Excavation and Permit Training - Module 1: General Excavation Risks	Internal		Downer - online	Nil											X	X	X	X	X		X													X	X	X																			
Excavation and Permit Training - Module 2: Service Identification and Location and Excavation Permit	Internal		Downer - online	Nil											X	X	X	X	X		X													X	X	X																			
Internal TW Procedure training	Internal		Downer - online	Nil																																																			
External TW Risk and Awareness training (i.e. Engineers Australia)	Internal		EA													X		X																																						

Project Management					
Delivery Management Essentials Program (DMEP) - Block 1: Delivery management fundamentals, risk and opportunity	Internal		PM Partners	$895	
Delivery Management Essentials Program (DMEP) - Cert IV in Project Management Practice	Internal		PM Partners	#####	Y
Delivery Management Essentials Program (DMEP) - Diploma of Project Management Practice	Internal		PM Partners	#####	Y
Project Valuations Specialist Module	Internal		Downer - PMO	$595	
Planning and Scheduling Specialist Module	Internal		Downer - PMO	$150	
Professional and Leadership Development					
Mentoring and Coaching	Internal		Downer	Nil	
Quality					
Implementing a Quality Management System ISO 9001:2015	External		SAI Global, Lloyd's Register		
Auditing a Qualy Management System ISO 9001:2015	External		SAI Global, Lloyd's Register		
Lead Auditor in Quality Management Systems ISO 9001:2015 & ISO 19011:2018	External		SAI Global, Lloyd's Register		
EMPLOYEE SPECIFIC PROGRAMS					
Operating Programs / IT					
BSC Corporate Travel Management System	Internal		Downer - online	Nil	
Concur Exense Management	Internal		Downer - online	Nil	
ExpressHR	Internal		Downer - online	Nil	
Hubble Reporting Tool	Internal		Downer - online	Nil	
JDEGS Fundamentals	Internal		Downer - online	Nil	
JDEGS Specialist Modules (dependent on system access level)	Internal		Downer - online	Nil	
KOFAX Invoice Processing	Internal		Downer - online	Nil	
Lucidity (INX)	Internal		Downer	Nil	
Lucidity (Subcontractor Management)	Internal		Downer - online	Nil	
PageUp for Hiring Managers					
QUALIFICATIONS					
Certificate III	External		Various RTO's		Y
Certificate IV	External		Various RTO's		Y
Diploma	External		Various RTO's		Y
Advanced Diploma	External		Various RTO's		Y
Associate Degree	External		Various RTO's		Y
Bachelor Degree	External		Various RTO's		Y
Graduate Certificate	External		Various RTO's		Y
Graduate Diploma	External		Various RTO's		Y
Masters	External		Various RTO's		Y
MBA	External		Various RTO's		Y
Equivalent Work Experience	External		Various RTO's		Y
TICKETS / LICENCES					
High Risk Work Licence	External		Various RTO's		Y
ACCREDITATIONS (if eligible)					
National Engineer Register (NER) •Professional Engineer (MIEAust or FIEAust) •Engineering Technologist (TMIEAust or TFIEAust) •Engineering Associate (AMIEAust or AFIEAust)	External	1 year	Engineers Australia		
Professional Engineer of The Association of Professional Engineers Australia (PEng)	External		Association of Professional Engineers Australia		
Registered Professional Engineer of Professionals Australia (RPEng)	External	3 years	Association of Professional Engineers Australia		

Appendix K: Indicative Audit Schedule (Template)

SECTION 1 – GENERAL						
Audit Schedule Level: *Upgradesgrades*	*Sydney Metro Packages 5 and 6 Station Upgrades*	*Sub-Level:*	*Dulwich Hill, Campsie and Punchbowl Stations*	Date created	**30/03//2021**	**Rev 0**
Prepared By:		Position:	Senior Environment and Sustainability Advisor	Date updated		

SECTION 2 – COLOUR LEGEND

Proposed = Required timing, Scheduled = Confirmed date with Auditee, Complete = Audit undertaken, Overdue = Proposed date or Scheduled date has passed current date and not rescheduled.

PROPOSED	SCHEDULED	COMPLETE	OVERDUE/ CANCELLED

Internal Audits are prioritised based on a risk assessment that includes an appreciation of factors including the following:
Safety: including Critical risks; Number of incidents, Relationship with regulatory contact and License conditions.
Environment: Number of incidents, License conditions, Aspects and impacts, critical risks
Quality: including Number of NCR's, Supply - On time delivery, Capacity and capability to specification
Sustainability: including social, environmental and economic aspects as specified in TfNSW SDGs
Other: including Financial risk to the business, Client feedback, Contract and Certification requirements

RISK RATING		
LOW (L)	MEDIUM (M)	HIGH (H)

SECTION 3 – MANAGEMENT SYSTEM & INTERNAL AUDITORS

Downer Environment / Sustainability	*Downer Quality*	*Downer Safety/Zero Harm - ZH*
	TBA	*TBA*
Sydney Metro / Independent Enviro / Sustainability	*TfNSW Quality*	*TfNSW Safety*
	TBA	*TBA*

AUDIT REQUIREMENTS

Source requirement	*Acronym*
Sydney Metro Standard Requirements (Works Contract)	*SMSRs*
ISO 14001:2015	*EMS*
ISO 18001:2007	*SMS*
ISO 9001: 2015	*QMS*
TfNSW Sustainable Design Guidelines. V.4.0	*TfNSW SDG*
Sustainability Management Plan	*SMP*

PROJECTS AUDITED ON	AUDIT TYPE
DULWICH HILL, CAMPSIE AND PUNCHBOWL	INTERNAL = INT
	EXTERNAL = EXT

No.	Audit Number / Subject area	Project/Location/Activity	*Audit on*	*Audit by*	Audit Type	Audit Requirements	Risk	Apr 2021	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2022	Feb	Mar	Apr	May	Jun	Jul
1.	**CAT 1**	**AUDITS FROM IPD - DOWNER**	**SM P5&6**		**EXT**																		
	ISO	ISO compliance	SM P5&6		EXT	Full corporate ISO	M																
2.	**CAT 2**	**ASSURANCE AUDIT**	**SM P5&6**		**EXT**																		
	Sustainability / Environment / Community	Quarterly EMS assurance audit	SM P5&6	GOB / ROL/ MT/ GF	INT	CEMP and full EMS	M																
3.	**CAT 3**	**COMPLIANCE AUDIT ON MANAGEMENT PLANS**	**SM P5&6**		**INT**																		
	Sustainability / Environment / Community	6-monthly review of all Environment and Sustainability Management Plans	SM P5&6	GOB / ROL / MT / JA/ GF	INT	CEMP & SMP	L	SMP	CEMP			CEMP SWMP NVMP HMP SMP	SWMP HMP	NVMP HMP		NVMP SMP		CEMP	CEMP		SWMP NVMP HMP		
4.	**CAT 4**	**SUBCONTRACTORS/SUPP LIERAUDIT**			**INT**																		
	Sustainability / Environment / Community	Waste end-location (e.g. Bingo, Suez,etc.)	SM P5&6	GOB / ROL / MT / JA	INT	EMS / SMP (6-monthly)	L																
	Quality / Sustainability	Steel subcontractor	SM P5&6	GOB / Quality	INT	EMS / SMP	L																
5.	**CAT 5**	**COMMERCIAL AUDITS (If Required)**	**SM P5&6**		**INT**																		
6.	**CAT 6**	**AUDIT / INSPECTION BY CLIENT /AEO / ISPs**	**SM P5&6**		**EXT**																		
	Environment and Sustainability	Environment and Sustainability audit	SM P5&6	Sydney Metro to arrange	EXT	SMSRs / SMP	L																
7.	**CAT 7**	**INDEPENDENT REVIEWS**	**SM P5&6**		**EXT**																		
	Environment and Sustainability	Monthly Sustainability report review	SM P5&6	Sydney Metro	EXT	SMSRs / SMP	L																
	Sustainability	Design report reviews	SM P5&6	Sydney Metro	EXT	SMSRs / SMP	L																

No.	Audit Number / Subject area	Project/Location/Activity	*Audit on*	*Audit by*	Audit Type	Audit Requirements	Risk	Aug 2022	Sep	Oct	Nov	Dec	Jan 2023	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1.	**CAT 1**	**AUDITS FROM IPD - DOWNER**	**SM P5&6**		**EXT**																		
	ISO	ISO compliance	SM P5&6		EXT	Full corporate ISO	M																
2.	**CAT 2**	**ASSURANCE AUDIT**	**SM P5&6**		**EXT**																		
	Sustainability / Environment / Community	Quarterly EMS assurance audit	SM P5&6	GOB / ROL/ MT/ GF	INT	CEMP and full EMS	M																
3.	**CAT 3**	**COMPLIANCE AUDIT ON MANAGEMENT PLANS**	**SM P5&6**		**INT**																		
	Sustainability / Environment / Community	6-monthly review of all Environment and Sustainability Management Plans	SM P5&6	GOB / ROL / MT /JA/ GF	INT	CEMP & SMP	L		CEMP SMP	SWMP HMP	NVMP				CEMP	SWMP NVMP HMP SMP	SWMP NVMP HMP				CEMP SMP		SWMP NVMP HMP
4.	**CAT 4**	**SUBCONTRACTORS/SUPP LIERAUDIT**			**INT**																		
	Sustainability / Environment / Community	Waste end-location (e.g. Bingo, Suez,etc.)	SM P5&6	GOB / ROL / MT / JA	INT	EMS / SMP (6-monthly)	L																
	Quality / Sustainability	Steel subcontractor	SM P5&6	GOB / Quality	INT	EMS / SMP	L																
5.	**CAT 5**	**COMMERCIAL AUDITS (If Required)**	**SM P5&6**		**INT**																		
6.	**CAT 6**	**AUDIT / INSPECTION BY CLIENT /AEO / ISPs**	**SM P5&6**		**EXT**																		
	Environment and Sustainability	Environment and Sustainability audit	SM P5&6	Sydney Metro to arrange	EXT	SMSRs / SMP	L																
7.	**CAT 7**	**INDEPENDENT REVIEWS**	**SM P5&6**		**EXT**																		
	Environment and Sustainability	Monthly Sustainability report review	SM P5&6	Sydney Metro	EXT	SMSRs / SMP	L																
	Sustainability	Design report reviews	SM P5&6	Sydney Metro	EXT	SMSRs / SMP	L																

Appendix L: Legal Obligations Register

Applicable Legislation Register

Monthly Review
State Legislation
Commonwealth Legislation

Summary Legislation List	
National	Commonwealth Legislation
	National Strategies
State	State Legislation
	State Strategies & Policies
Local	Regional Strategies
	Local Legislation

Applicable Legislation	
Planning & Development	Commonwealth Legislation
	State Legislation
	Regional & Local Plans, Policies & Strategies
	State Plans, Policies & Strategies
Cultural Heritage	Commonwealth Legislation
	State Legislation
Land Management	National Policies and Strategies
	State Legislation
	Regional & Local Plans, Policies & Strategies
Water	State Legislation
	State Policies & Strategies
Waste	State Legislation
Pollution & Hazardous Substance Management	Commonwealth Legislation
	State Legislation
	State Policies & Strategies
Energy	Commonwealth Legislation
	Commonwealth Policies & Strategies
Biodiversity	Commonwealth Policies & Strategies
	State Legislation
	State Policies & Strategies

Applicable Legislation Register

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
January 2021	Yes	NSW - Ports and Maritime Administration Act 1995	A minor change has been made to a departmental name, due to the dissolution of the Roads and Maritime Services.	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/1/				
February 2021	Yes	NSW - Biodiversity Conservation Regulation 2017	Cahnges have been made to prohibit the breeding or importation of certain marine mammals.	N/A	N/A	N/A
		NSW - National Parks and Wildlife Regulation 2019	Among other things, references to the Chief Executive have been updated to refer to either the Secretary of the Department of Planning, Industry and Environment or the Secretary of the Department of Premier and Cabinet.	N/A	N/A	N/A
		NSW - Water Management (General) Regulation 2018	New exemptions for water access licences, water use approvals, water supply work approvals and controlled activities have been added to legislation, to facilitate the carrying out of urgent works to remove groundwater and overland flow water in response to an emergency event	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/2/				
March 2021	Yes	NSW - Marine Pollution Act 2012	Changes have occurred to ensure consistency with C'wealth legislation and MARPOL, enforce the maintenance of sewage pollution prevention equipment, and provide for preventative action against marine pollution in relation to abandoned, derelict or out-of-commission vessels. Other minor and consequential amendments have also been made, including some definition changes.	N/A	N/A	N/A
		NSW - Marine Pollution Regulation 2014	Amendments have occurred to incorporate changes to Marine Orders adopted and modified under the Marine Pollution Act 2012. Various consequential amendments have been made, including changes to reflect the adoption of the current versions of Marine Order 95 and Marine Order 96.	N/A	N/A	N/A
		NSW - Protection of the Environment Operations (Clean Air) Regulation 2010	Changes have occurred to provide for different levels of control of burning in local government areas, including the approval of burning in the open, and to update references to local government areas following the amalgamation of certain areas.	N/A	N/A	N/A
		NSW - Protection of the Environment Operations (General) Regulation 2009	The discharge of PFAS firefighting foam for the purposes of firefighting training or demonstration is now prohibited. Additionally, from 26 September 2022, the use of prescribed long-chain PFAS firefighting foam, as well as the use and sale of PFAS firefighting foam in portable fire extinguishers will be restricted, unless under an exemption from the EPA.	N/A	N/A	N/A
		NSW - State Environmental Planning Policy (Koala Habitat Protection) 2021	Changes have occurred to reinstate the policy framework of the State Environmental Planning Policy (Koala Habitat Protection) 2019 to 83 Local Government Areas across the state, in order to ensure koala habitat is properly considered during the development assessment process. The Koala SEPP 2020 will however continue to apply in certain core rural zones until new land management and private native forestry codes are developed.	N/A	N/A	N/A
		C'wealth - Australian Radiation Protection and Nuclear Safety Regulations 2018	Changes have been made to, among other things, add and update the publication details of certain Codes, amend exempt dealings to exclude lasers, optical fibre systems and klystrons from licensing requirements, and add a new requirement for licence holders to review and update relevant plans and arrangements following an accident.	N/A	N/A	N/A
		C'wealth - Export Control Act 2020	A new legislative framework for agricultural exports has commenced. The Export Control Act 2020 streamlines and consolidates the export requirements from multiple Acts and legislative instruments, and reduces complexity, duplication and ambiguity. Among other things, the Act specifies that the export of prescribed goods is prohibited unless the requirements of the Act or other conditions are met	N/A	N/A	N/A

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
		C'wealth - Export Control (Organic Goods) Rules 2021	A new legal framework for agricultural exports has commenced. The Export Control (Organic Goods) Rules 2021 set out the requirements for the export of organic goods. The Rules specify that the export of these goods is prohibited unless the exporter holds an organic goods certificate that is in force at the time the goods are exported.	N/A	N/A	N/A
		C'wealth - Export Control Act 1982	A new legal framework for agricultural exports has commenced. The Export Control Act 1982 has been repealed, as the export controls set out in that Act have been incorporated into the new Export Control Act 2020.	N/A	N/A	N/A
		C'wealth - Export Control (Orders) Regulations 1982	A new legal framework for agricultural exports has commenced. Regulations made under the previous Export Control Act have been repealed.	N/A	N/A	N/A
		C'wealth - Export Control (Organic Produce Certification) Orders	A new legal framework for agricultural exports has commenced. Requirements for the export of organic goods are now set out in the Export Control (Organic Goods) Rules 2021	N/A	N/A	N/A
		C'wealth - Renewable Energy (Electricity) Regulations 2001	Large and small-scale renewable energy percentages have been set for 2021. The large-scale generation percentage is set at 19.54%, and the small-scale technology percentage is set at 28.80%. A consequential amendment has also been made due to the commencement of the Export Control Act 2020.	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/3/				
April 2021	Yes	NSW - Water Management (General) Regulation 2018	New exemptions have been added to allow a landholder to use or take water from a tailwater drain for the purpose of collecting rainfall run-off from an irrigated field without holding a water supply work approval or water access licence, under specified circumstances	N/A	N/A	N/A
		C'wealth - Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2020	The new Greenhouse and Energy Minimum Standards Determination for refrigerated cabinets has commenced. For the first time, requirements have been imposed on refrigerated storage cabinets, ice cream cabinets and gelato scooping cabinets, in addition to refrigerated display cabinets. The new Determination also introduces a voluntary star rating framework, adopts minimum energy performance standards set by the European Commission, adopts ISO and European test methods, and includes alternative, less onerous testing requirements for refrigerated cabinets supplied in low volumes	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/4/				
May 2021	Yes	C'wealth - Ambient Air Quality NEPM 2021	The Ambient Air Quailty NEPM has been amended to reflect the latest scientific understanding and to allow for adequate health protection against sulfur dioxide, nitrogen dioxide and photochemical oxidants such as ozone.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › May 2021 - Environment Essentials (enviroessentials.com.au)				
June 2021	Yes	C'wealth - Biosecurity Act 2015	New biosecurity legislation passed in Parliament which gives courts access to higher penalties for biosecurity breaches. The new maximum penalty is $1.11 million as well as jail time to reflect the true seriousness of non-compliance. These penalties have been increased for 28 civil and criminal provisions under the Biosecurity Act 2015.	N/A	N/A	N/A
		NSW - Plastics Action Plan	New legislation will be introduced in the coming months regarding the use of single-use plastics in NSW. A range of common single-use plastics are soon to be phased out including plastic bags and plastic straws.	N/A	N/A	N/A
		C'wealth - Heavy Vehicle (Vehicle Standards) National Regulation	New legislation will be introduced on the 1st of July 2021 in regards to obligation for heavy vehicles - noise emissions. Changes have been made to facilitate the implementation of new vehicle standards, with consequential amendments to the definition of ADR (Australian Design Rules) to align it with the Commonwealth Road Vehicle Standards Act 2018 and to update when a vehicle can be considered as being certified to ADR 83/00.	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/6/				

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
July 2021	Yes	C'wealth - Carbon Credits Methodology Determination	The Emissions Reduction Assurance Committee is proposing a variation to the Carbon Credits (Carbon Farming Initiative - Coal Mine Waste Gas) Methodology Determination 2015. The variation will implement various changes intended to encourage additional abatement and ensure that the Methodology credits genuine emissions reductions.	N/A	N/A	N/A
		NSW - Energy Savings Scheme Rule 2020-2021	Amendment to ESS Rule proposed, currently closed for comment. Proposed amendments include changes to existing air conditioner and refrigerated cabinet activity definitions, and the potential for new heat pump & solar water heater activities.	N/A	N/A	N/A
		NSW - Mining Regulation 2016	Legislation changes prescribe new standard conditions for holders of mining leases granted under the Mining Act 1992, including prevention and minimisation of harm to the environment, rehabilitation and final land use outcomes, risk assessments and record keeping, amongst others.	N/A	N/A	N/A
		C'wealth - New Emissions Reduction Fund Methodology	The Emissions Reduction Assurance Committee is proposing a new Emissions Reduction Fund Methodology for industrial and commercial emissions reduction. This methodology intends to replace the existing Industrial Electricity and Fuel Efficiency Methodology.	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/7/				
August 2021	Yes	C'wealth - Greenhouse and Energy Minimum Standards Determination 2019	Changed legislation for household refrigerating appliances has commenced. Minimum energy efficiency requirements have been strengthened, and products will now need to be tested in accordance with international test standards rather than regionally specific standards.	N/A	N/A	N/A
		NSW - Protection of the Environment Operations (Clean Air) Regulation 2021	Legislation changed. New legislation commenced 1st September 2021 and replaces the expired 2010 Regulation with minor changes. The list of LGA's in which burning is prohibited has been updated. Other changes are to obligation source only, including changes to log book keeping and burning in open air or incinerators, among others.	N/A	N/A	N/A
		NSW - Protection of the Environment Operations (General) Regulation 2021	Legislation changed. New legislation commenced 1st September 2021 and replaces the expired 2009 Regulation. Minor changes have been made to miscellaneous matters, including requirements related to water pollution. However changes to NPI reporting, notification of pollution incidents and pollution incident response plans relate to obligation source only.	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/8/				
September 2021	Yes	NSW - Pesticides Act 1999	Order issued by the EPA to exempt certain people from Section 39(4) of the Pesticides Act 1999, in relation to training requirements of Pesticide Control Orders as specified - in the circumstances of emergency, being the current COVID-19 outbreak in NSW. Came into force 7/10/21.	N/A	N/A	N/A
		NSW - SEPP (Vegetation in Non-Rural Areas) 2017	Changes have been made to requirements for vegetation clearance in non-rural areas. Circumstances in which authorisation is not required for vegetation clearance has been updated.	N/A	N/A	N/A
		NSW - SEPP (Mining, Peteroleum Production & Extractive Industries) 2007	New prohibited development areas for mining and petroleum works have been inserted.	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/9/				

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
October 2021	Yes	C'wealth - Biosecurity Amendment (Enhanced Risk Management) Bill 2021	This Bill amends the *Biosecurity Act 2015* to expand pre-arrival reporting requirements fro aircraft and **vessels**, strengthen penalties for non-compliance with negative pratique requirements, create a mechanism to make a human biosecurity group direction, increase civil and criminal penalties for contraventions of certain requirements in relation to goods; amend the process for making certain determinations specifying prohibited, conditionally non-prohibited and suspended goods or granting permits based on risk assessments; and provide legislative authority for expenditure for biosecurity-related programs and activities, such as surveillance programs for pests and diseases.	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/10/				
November 2021	Yes	C'wealth - Recycling and Waste Reduction (Export - Waste Tyres) Rules 2021	Rules are being drafted to regulate the export of waste tyres. These rules are expected to commence of 1 December 2021. The rules will prohibit the export of whole-baled tyres and introduce licencing requirements for the export of certain waste tyres or tyre products.	N/A	N/A	N/A
		C'wealth - Draft Australian in-water Cleaning Standards	These standards outline minimum requirements for in-water cleaning of vessels in Australian waters, and will improve the management of biosecurity and chemical contamination risks to the environment. Applications of standards include: Hull grooming, Propellor cleaning, Biofouling & Cleaning locations. Draft publication only.	N/A	N/A	N/A
		NSW - Plastic Reduction and Circular Economy Bill 2021	The objects of this Bill are: to prohibit supply into & within the State of certain plastic items, to specify design standards for certain items, to establish a product stewardship framework for brand owners of certain products, and to create various offences relating to the matters mentioned. Prohibited plastic items include plastic items which are deemed unnecessary or problematic for environmental, human health or economic reasons, including reasons relating to waste management or resource management.	N/A	N/A	N/A
		NSW - Pesticides Regulation 2017	Changes due to the commencement of parts of the Pesticides Amendment Regulation 2021 on 26 November 2021. The changes create exemptions relating to the use of waterproofing products containing pesticides from certain provisions, and updates the exemptions that applies to the use of pesticides contrary to its approved label.	N/A	N/A	N/A
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/11/				
		C'wealth - Industrial Chemicals (General) Legislation Amendment (2021 Measures No. 1) Rules 2021	Amendments to industrial chemical rules commenced on 23 November 2021, with more changes to commence on 10 December 2021. Some changes to rules include updating record keeping requirements for a designated kind of release into the environment, and requiring importers to declare nanoscale chemicals, among others.			
		NSW - Plastic Reduction and Circular Economy Act 2021	The NSW Government has passed this Act through Parliament, enabling the phase out of single-use plastics in NSW from June 2022.	N/A	N/A	N/A
		NSW - Local Land Services Act 2013	Obligation for pest control removed			
		NSW - Environmentally Hazardous Chemicals Act 1985	A Declaration of Chemical Waste commenced on 3 December 2021, however no changes to Enviro Law occurred. Elemental mercury and mercury compounds are now declared to be chemical wastes for the purpose of the Environmentally Hazardous Chemicals Act 1985.	N/A	N/A	N/A
		NSW - Electricity Supply Act 1995	Changes to the Electricity Supply Amendment (Renewable Fuel Scheme) Regulation 2021 commenced on 17 December 2021. A renewable fuel scheme has been established in order to create a financial incentive to increase the production of green hydrogen and other renewable fuels.	N/A	N/A	N/A

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
December 2021	Yes	C'wealth - Hazardous Waste (Regulation of Exports and Imports) Act 1989	Changes to parts of the Hazardous Waste (Regulation of Exports and Imports) Amendment Act 2021 commenced on 30 December 2021. Changes have been made to implement amendments to the Basel Convention in relation to plastic wastes, adopt standardised Commonwealth regulatory powers and best practice regulation, improve the compliance and enforcement framework under the Act, and improve administration efficiency.			
		NSW - Pesticides Regulation 2017	Changes to parts of the Pesticides Amendment Regulation 2021 commenced on 17 December 2021. Changes to obligations for prescribed pesticide work, record-keeping, and use in common areas of multiple occupancy residential complexes. Changes have been made to include timber pest management technician work as a kind of prescribed pesticide work.	N/A	N/A	N/A
		NSW - National Parks and Wildlife Act 1974	Amendments have been made to strengthen the National Parks and Wildlife Act 1974 to improve conservation outcomes and streamline park management planning and approvals. Among other things, a new offence has been added for harming an environmental or cultural value of land that the Minister has declared to be an asset of intergenerational significance. Minor administrative changes have also been made to replace references to the Chief Executive with the Department of Premier and Cabinet Secretary.	N/A	N/A	N/A
		NSW - Environment Legislation Amendment Bill 2021	The object of this Bill is to make various amendments to the: Contaminated Land Management Act 1997, Land and Environment Court Act 1979, Pesticides Act 1999, Protection of the Environment Administration Act 1991, Protection of the Environment Operations Act 1997, Radiation Control Act 1990, and the Waste Avoidance and Resource Recovery Act 2001.	N/A		
		https://m.enviroessentials.com.au/envirolaw/new-south-wales/updates/2021/12/				
January 2022	Yes	C'wealth - Recycling and Waste Reduction (Mandatory Product Stewardship—Mercury-added Products) Rules 2021	The Australian Government has announced that it has formally ratified the Minamata Convention on Mercury, an international treaty that seeks to protect human health and the environment from release of mercury and mercury compounds. Legislation to prohibit the import, export and manufacture of mercury-added products is expected to commence on 7 March 2022.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › January 2022 - Environment Essentials (enviroessentials.com.au)				
February 2022	Yes	State Environmental Planning Policy (Biodiversity and Conservation) 2021	Commenced 1 March 2022, repealing and replacing the State Environmental Planning Policy (Koala Habitat Protection) 2021, State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011, State Environmental Planning Policy No 19 - Bushland in Urban Areas, and the State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017. Changes to obligations for clearing - non-rural areas, offsetting biodiversity impacts, and state environmental planning policies. The State Environmental Planning Policies have been consolidated to simplify and improve the planning policy framework. Requirements for planning in relation to biodiversity and conservation remain largely the same.	N/A	N/A	N/A
		State Environmental Planning Policy (Transport and Infrastructure) 2021	The State Environmental Planning Policies have been consolidated to simplify and improve the planning policy framework. Requirements for planning in relation to transport and infrastructure remain largely the same.	N/A	N/A	N/A

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
		Water Management (General) Regulation 2018	New exemptions have been added to allow a landholder to use or take water from a tailwater drain for the purpose of collecting rainfall run-off from an irrigated field without holding a water supply work approval or water access licence, under specified circumstances.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › February 2022 - Environment Essentials (enviroessentials.com.au)				
March 2022	Yes	Environmental Planning and Assessment Regulation 2000	Ensure that developments that involve building work are carried out in accordance with the Australian Building Codes Board (ABCB): National Construction Code: Building Code of Australia, including, among other things, the requirement that new housing construction meets the 6 Star housing energy rating standard.	N/A	N/A	N/A
		Environmental Planning and Assessment Regulation 2021	Obligation for development assessment added. Changes to obligations for electricity network development, energy efficiency in buildings - obligations for builders and designers, and mining and petroleum development.	N/A	N/A	N/A
		Recycling and Waste Reduction (Mandatory Product Stewardship - Mercury-added Products) Rules 2021 (Commonwealth)	Changes have been made to implement Australia's obligations under the Minamata Convention on Mercury, which aims to protect human health and the environment from emissions of mercury and mercury compounds. New mandatory product stewardship requirements have commenced to prohibit the manufacture, import and export of mercury-added products, and the incorporation of mercury-added products into assembled products.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › March 2022 - Environment Essentials (enviroessentials.com.au)				
April 2022	Yes	No applicable legislation changes		N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › April 2022 - Environment Essentials (enviroessentials.com.au)				
May 2022	Yes	Plastic Reduction and Circular Economy Act 2021	The ban on the supply of lightweight plastic bags in New South Wales has commenced. The ban on other single use plastic items, expanded polystyrene food service items, and plastic microbeads in certain rinse-off personal care products will commence on 1 November 2022.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › May 2022 - Environment Essentials (enviroessentials.com.au)				
June 2022	Yes	No applicable legislation changes		N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › June 2022 - Environment Essentials (enviroessentials.com.au)				
July 2022	Yes	Protection of the Environment Operations (General) Regulation 2021	Changes have been made to specify requirements for the thermal treatment of waste.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › July 2022 - Environment Essentials (enviroessentials.com.au)				
August 2022	Yes	Protection of the Environment Operations Act 1997	Legislation changed. The Protection of the Environment Operations (General) Regulation has been remade. A licensee is now only required to test a pollution incident response management (PIRM) plan annually and after an incident which caused or threatened material harm to the environment. Change behind the link Plan Inclusions. Minor changes have been made to the matters that must be included in a PIRM plan.	N/A	N/A	N/A
		State Environmental Planning Policy (Biodiversity and Conservation) 2021	New development consent requirements have been added for the clearing of native vegetation on avoided land or land in a strategic conservation area.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › August 2022 - Environment Essentials (enviroessentials.com.au)				
September 2022	Yes	No applicable legislation changes		N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › September 2022 - Environment Essentials (enviroessentials.com.au)				

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
October 2022	Yes	Biodiversity Offsets Payment Calculator Order 2022	The new Order replaces the 2019 Order, with changes to the requirements for biodiversity offsets payment calculation and the introduction of a new Biodiversity Conservation Fund Charge System.	N/A	N/A	N/A
		Plastic Reduction and Circular Economy Act 2021	Changes have been made to ban the supply of additional plastic items, including single-use straws, stirrers, cutlery, cotton buds, bowls and plates, certain rinse-off personal care products containing plastic microbeads, and expanded polystyrene food service items.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › October 2022 - Environment Essentials (enviroessentials.com.au)				
November 2022	Yes	No applicable legislation changes		N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › September 2022 - Environment Essentials (enviroessentials.com.au)				
December 2022	Yes	Protection of the Environment Operations (Clean Air) Regulation 2022	Commenced 16 December 2022, repealing and replacing the Protection of the Environment Operations (Clean Air) Regulation 2021. Changes to obligations for burning in open air or incinerators, emissions limits (non-scheduled premises), emission limits (scheduled premises), motor vehicles - emissions, motor vehicles - prescribed anti-pollution devices, solid fuel burning heaters, sulfur in liquid fuel, and volatile organic liquids - control equipment. Changes to additional obligations for large loading plant - volatile organic liquid, large storage tanks - volatile organic liquid, large tanker trucks - volatile organic liquid, notification, petrol dispenser compliance signs, petrol dispenser vapour recovery - stage two, petrol volatility, small storage tanks - volatile organic liquid, storage tank vapour recovery - stage one, transfer of petrol into motor vehicle fuel tanks, and vapour recovery log books.	N/A	N/A	N/A
		State Environmental Planning Policy (Transport and Infrastructure) 2021	Changes due to the commencement of the State Environmental Planning Policy (Transport and Infrastructure) Amendment (Thermal Energy from Waste) 2022 on 16 December 2022. Obligation for thermal energy from waste development added.	N/A	N/A	N/A
		Renewable Energy (Electricity) Regulations 2001 (Commonwealth)	Changes due to the commencement of the Renewable Energy (Electricity) Amendment (Native Forest Wood Waste) Regulations 2022 on 17 December 2022. Changes to additional obligation for renewable electricity generator.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › December 2022 - Environment Essentials (enviroessentials.com.au)				
January 2023	Yes	No applicable legislation changes		N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › January 2023 - Environment Essentials (enviroessentials.com.au)				
February 2023	Yes	Biosecurity Regulation 2017	Changes due to the commencement of the Biosecurity Amendment (Miscellaneous) Regulation 2023 on 17 February 2023. Changes to obligations for animal pests and diseases, aquatic pests and diseases, biosecurity zones, invasive species, plant pests and diseases, and prohibited matter. Changes to additional obligation for material for use in stock feed.	N/A	N/A	N/A
		Protection of the Environment Operations Act 1997	Changes due to the commencement of the Protection of the Environment Operations Amendment (Waste Storage) Regulation 2023 on 24 February 2023. Changes to obligation for licensing. The list of scheduled activities has been amended to specify that waste storage is not a scheduled activity in certain circumstances relating to community recycling centres and household chemical clean-out events.	N/A	N/A	N/A

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
		Renewable Energy (Electricity) Regulations 2001 (Commonwealth)	Changes due to the commencement of the Renewable Energy (Electricity) Amendment (Percentages) Regulations 2023 on 4 February 2023. Changes to additional obligation for renewable energy certificates. Large and small-scale renewable energy percentages have been set for 2023. The large-scale generation percentage is set at 18.96%, and the small-scale technology percentage is set at 16.29%.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › February 2023 - Environment Essentials (enviroessentials.com.au)				
March 2023	Yes	Protection of the Environment Operations (Waste) Regulation 2014	Changes due to the commencement of parts of the Protection of the Environment Operations (Waste) Amendment (Waste Contributions) Regulation 2023 on 2 March 2023. Changes to additional obligation for waste levy. The changes update the definition of a scheduled waste disposal facility to clarify the waste disposal activities that are scheduled activities, and as a result, make consequential changes to the exemptions from paying the waste levy by occupiers of scheduled waste facilities, among other things.	N/A	N/A	N/A
		Water Management (General) Regulation 2018	Changes due to the commencement of the Water Management (General) Amendment (Temporary Offence Exemptions) Regulation 2023 on 2 March 2023. Changes to obligation for water access licence and water use approvals. Changes have been made to add a new temporary exemption for alternatives to water supply works impacted by floodwaters for Water Access Licence and Water Use Approval holders.	N/A	N/A	N/A
		EnviroLaw › New South Wales › Updates › March 2023 - Environment Essentials (enviroessentials.com.au)				
April 2023	Yes	National Greenhouse and Energy Reporting Act 2007 (Commonwealth	Changes due to the commencement of parts of the Safeguard Mechanism (Crediting) Amendment Act 2023 on 12 April 2023. Obligation for regulatory report audits added. Changes to obligations for safeguard mechanism - excess emissions and safeguard mechanism - registration and reporting. Changes have been made to implement upcoming reforms to the Safeguard Mechanism scheme. The National Greenhouse and Energy Reporting Act 2007 has been amended to establish the framework for creating Safeguard Mechanism Credits, which are tradable credits that can be generated by Safeguard facilities that stay below their baselines. The reformed scheme will commence on 1 July 2023, following further amendments to the Safeguard Rules and other relevant subordinate legislation	N/A	N/A	N/A
May 2023	Yes	Water Management (General) Regulation 2018	Changes to obligation for water access licence and water use approvals. The temporary exemption from Section 91B of the Water Management Act 2000 for alternatives to water supply works impacted by floodwaters has been repealed. Obtain a licence or permit before constructing or using a water conservation, irrigation, drainage, water supply or urban drainage work that impounds water or affects the quantity or use of water in a watercourse or lake. For areas covered by an operational water sharing plan, comply with the water access licensing and water use, supply work, drainage work, flood work, controlled activity and aquifer interference approval requirements of the Water Management Act 2000.	N/A	N/A	N/A
Aug-23	Yes	No updates	No updates	N/A	N/A	N/A

Monthly Review of Applicable Legislation

Month	Enviro Essential Update Reviewed?	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?	Management of Change Completed?
Jun-23	Yes	NGER Measurement and Reporting Requirements Updated	The National Greenhouse and Energy Reporting (Measurement) Determination 2008 (Commonwealth) and National Greenhouse and Energy Reporting Regulations 2008 (Commonwealth) have been amended by the National Greenhouse and Energy Reporting (Measurement) Amendment (2023 Update) Determination 2023 and National Greenhouse and Energy Reporting Amendment (2023 Measures No. 1) Regulations 2023 respectively on 1 July 2023, however no changes to EnviroLaw obligations occurred. The amendments update methods for the calculation of scope 2 emissions, emissions from Queensland open cut mines, and methane released from landfills. Two new biofuels have also been added as reportable fuels, and provisions have been included for the reporting of information associated with estimates of scope 2 emissions from the consumption of electricity. See here and here for further information.	N/A	N/A	N/A
Jul-23	Yes	Plastic Reduction and Circular Economy Act 2021	Changes due to the commencement of the Statute Law (Miscellaneous Provisions) Act 2023 on 14 July 2023. Changes to additional obligation for supply of prohibited plastics.	N/A	N/A	N/A
Sep-23	Yes	No updates	Changes have been made to specify the definition of a prohibited plastic item as an item from the list of plastic items in Schedule 1 of the Act. No updates	N/A	N/A	N/A

Monthly Review of Applicable Legislation

Month	EPA Website Viewed
March 2022	Yes
August 2022	Yes
August 2022	Yes
March 2022	Yes

August 2022	Yes
December 2022	Yes
July 2022	Yes
July 2022	Yes

March 2022	Yes

Relevant Legislation Updated (new row for each change)
Contaminated Land Management Act 1997
Contaminated Land Management Regulation 2022
Dangerous Goods (Road and Rail Transport) Regulation 2022
Pesticides Act 1999

Protection of the Environment Operations (Clean Air) Amendment Regulation 2022
Protection of the Environment Operations (Clean Air) Regulation 2022
Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2022
Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2022

Protection of the Environment Operations Act 1997

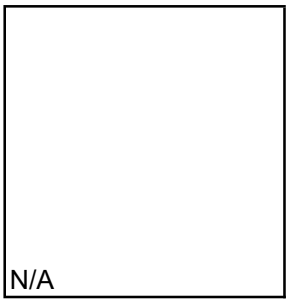
Summary of Legislation Change/Applicability	Action Required
Contaminated Land Management Act 1997 extend existing financial assurance provisions to ongoing maintenance orders and restrictive and public positive covenants as these instruments are used for managing residual contamination allow the EPA to issue a clean-up or prevention notice as soon as it is notified of contamination, so that it can take immediate action to prevent further contamination and clean-up of the site. increase maximum penalties to align with similar offences and court orders to those available under the Protection of the Environment Operations Act 1997.	No action required.
made under the Act, supporting the administration of the site auditor scheme with new provisions enabling the EPA to waive or refund accreditation fees in certain circumstances, updates the particulars for annual returns submitted by site auditors, prescribing certain offences as penalty notice offences with amendments to align penalty notice amounts with environment protection legislation, and requiring certain EPA guidelines about financial assurances and a protocol for monetary benefits are observed.	No action required.
Require cleaner petrol to be supplied in the low volatility zone for an extra month over summer impose stricter emission limits and controls for volatile organic liquids in storage tanks, loading plant and tank vehicles require plant and activities in Group 3 and Group 4 - which started operating or were upgraded between 1979 and 1997- to comply more stringent air emission standards of Group 5 by 1 November 2027 and Group 6 by 1 November 2030 reduce administrative burden by removing or harmonising provisions that are duplicated, outdated or obsolete.	No action required - all plant
Pesticides Act 1999 enable the EPA to make a pesticide control order without the Minister's approval, to support the regulatory independence of the EPA and act quickly to ensure the safe use and disposal of restricted pesticides. align the available court orders with those available under the Protection of the Environment Operations Act 1997 so that a broader suite of orders can be utilised in sentencing convicted offenders for pesticides crimes.	No action required.

Introduces an application fee for EPL based on the complexity and the scale of the activities proposed to be authorised by the licence in order to recover the EPA's costs when assessing licence applications and preparing new licences; amends the definition of 'extractive activities' in Schedule 1 of the Protection of the Environment Operations Act 1997 to ensure that extractive activities that pose a risk to the environment are appropriately regulated and to require a licence where the extractive activity involves, over the period of 1 year, the extraction of: more than 30, 000 tonnes of extractive materials (where 0.65 cubic metres of extractive material that is wet is taken to weigh 1 tonne), or more than 30, 000 cubic metres if the activity is maintenance dredging of a navigation channel for vessels carried out by or on behalf of a public authority; introduces two sub-categories of activity within the scheduled activity of 'petroleum products and fuel production' and makes corresponding changes to licensing fee thresholds for each, so that regulation is proportionate to the environmental risk of these activities; excludes bivalve molluscs and seaweed propagules from the scheduled activity of 'aquaculture and mariculture'; expands the matters that are required to be tested using approved methods to include the	No action required.
Require cleaner petrol to be supplied in the low volatility zone for an extra month over summer impose stricter emission limits and controls for volatile organic liquids in storage tanks, loading plant and tank vehicles require plant and activities in Group 3 and Group 4 - which started operating or were upgraded between 1979 and 1997- to comply more stringent air emission standards of Group 5 by 1 November 2027 and Group 6 by 1 November 2030 reduce administrative burden by removing or harmonising provisions that are duplicated, outdated or obsolete.	No action required - all plant
Offence The EfW Regulation implements the Energy from Waste Infrastructure Plan by making it an offence to carry out the thermal treatment of waste if It involves or results in energy recovery from the waste, and An environment protection licence is required for any scheduled activity at the premises The offence extends to any work carried out to enable the thermal energy from waste activity to be carried out at the premises. The maximum penalties for the offences are For a corporation – 400 penalty units, and a further 400 penalty units per day for each day the offence continues For an individual – 200 penalty units, and a further 200 penalty units per day for each day the offence continues.	No action required.
Exceptions The following exceptions apply to the prohibition on energy from waste Eligible waste fuels: the prohibition does not apply to the thermal treatment of a fuel Defined in Part 1 of the Eligible Waste Fuel Guidelines as published by the EPA in the Gazette from time to time, and Listed in section 3 of the NSW Energy from Waste Policy Statement as published by the EPA in the Gazette from time to time. Designated precincts: the prohibition does not apply to the following precincts the Parkes Activation Precinct the Richmond Valley Jobs Precinct the Southern Goulburn Mulwaree Precinct	No action required.

Protection of the Environment Operations Act 1997 extend regulatory requirements and considerations to current and former directors and related corporate bodies to ensure businesses that set up and dissolve companies to deflect accountability can be held responsible. extend liability for illegal waste dumping to vehicle owners to ensure illegal dumpers are held to account. increase protections for officers investigating environmental offences so that they can carry out their jobs safely. expand regulatory powers and tools to ensure those responsible for contamination and pollution can be made to clean it up or manage it into the future, including the ability to act against multiple people that contributed to pollution.	No action required.

Management of Change Required?
N/A
N/A
N/A
N/A

N/A
N/A
N/A
N/A


N/A

Monthly Review of Applicable Legislation

https://www.epa.nsw.gov.au/licensing-and-regulation/legislation-and-compliance/whats-new-in-law

Month	EPA Website Viewed	Relevant Legislation Updated (new row for each change)	Summary of Legislation Change/Applicability	Action Required	Management of Change Required?
February 2023	Yes	Protection of the Environment Operations Amendment (Waste Storage) Regulation 2023	The Protection of the Environment Operations Amendment (Waste Storage) Regulation 2023 commenced on 24 February 2023. The Regulation amends Schedule 1 to the Protection of the Environment Operations Act 1997 to increase the thresholds for the scheduled activity of waste storage at some Community Recycling Centres and premises receiving waste from Household Chemical Cleanout events. Specifically, the Regulation amends cl 42(3)(a) of Schedule 1 to the Protection of the Environment Operations Act 1997 to allow: Some Community Recycling Centres to store up to 12 tonnes of hazardous waste, restricted solid waste, liquid waste or special waste (other than waste tyres) at any time; and Household Chemical Cleanout events to store up to 80 tonnes of hazardous waste, restricted solid waste, liquid waste or special waste (other than waste tyres) collected during the event without the need for an environment protection licence for 'waste storage'. The Regulation also inserts cl 42(5) into Schedule 1 containing relevant definitions. The changes to the threshold for Community Recycling Centres only currently applies to 12 high volume sites. These are identified in NSW Government Gazette No 63 of Friday 10 February 2023.	No action required.	N/A
February 2023	Yes	Protection of the Environment Operations Legislation Amendment (Miscellaneous) Regulation 2023	The Regulation makes minor miscellaneous amendments to correct, streamline, and remove redundancies from environment protection legislation. The Regulation makes the EPA the approver of treatment methods for clinical and sharps waste, rather than NSW Health, in Schedule 1 of the Protection of the Environment Operations Act 1997; fixes cross-references in the Protection of the Environment Operations (General) Regulation 2022; and, removes duplicate noise labelling requirements for domestic air conditioners and unnecessary noise limits and labelling requirements for ride-on mowers in the Protection of the Environment Operations (Noise Control) Regulation 2017.	No action required.	N/A
February 2023	Yes	Waste Avoidance and Resource Recovery (Container Deposit Scheme) Amendment (Miscellaneous) Regulation 2023	The Waste Avoidance and Resource Recovery (Container Deposit Scheme) Amendment (Miscellaneous) Regulation 2023 commenced on 17 February 2023. The Regulation amends the Waste Avoidance and Resource Recovery (Container Deposit Scheme) Regulation 2017 to remove ambiguity and anomalies, reduce administrative burden and address compliance risks in the NSW container deposit scheme (Scheme) by clarifying that the EPA may impose conditions on a collection point arrangement approval (Approval) to protect human health and the environment and making it an offence to contravene a condition of an Approval clarifying that the 'holder' of an Approval includes both the network operator and the collection point operator for the Approval. The EPA may suspend or revoke an Approval if a holder of an Approval contravenes the Approval or Scheme legislation requiring the holder of an Approval to apply to the EPA to vary a condition of the Approval and clarifying the meaning of a 'condition' excluding glass containers used, rather than designed, to contain only wine or spirituous liquor from the Scheme. This prevents suppliers from placing beverages that fall within the Scheme (such as beer) in glass containers designed to contain wine to circumvent Scheme requirements making it an offence for a collection point operator to fail to cause payment of a refund amount payable by electronic funds transfer within 3 days after a container is counted by a machine used by the collection point operator to count, verify and sort containers specifying that the EPA can refuse a container approval on the ground that the containers concerned will not comply with a condition of approval prescribed by the regulations specifying that the EPA may suspend or revoke a container approval on the ground that the EPA considers the material forming part of the container is not suitable for recycling or reuse or another appropriate method of disposal enabling an application for the transfer of a container approval to be made in the same way as an application for a container approval clarifying that fermented milk and milk with added cultures (such as drinking yoghurt or kefir) fall within scope of the Scheme. This aligns with the QLD and SA container deposit schemes specifying that an 'alternative waste treatment plant operator' includes a person who holds an environment protection licence authorising waste processing (non-thermal) treatment declaring the container deposit scheme legislation in the ACT, QLD, NT and WA as corresponding laws for the container deposit scheme. This ensures consumers can claim refunds in NSW for containers acquired in those jurisdictions without committing an offence.	No action required.	N/A
March 2023	Yes	Protection of the Environment Operations (Waste) Amendment (Waste Contributions) Regulation 2023	The Protection of the Environment Operations (Waste) Amendment (Waste Contributions) Regulation 2023 amends the Protection of the Environment Operations (Waste) Regulation 2014 to clarify and improve the waste levy framework. The Regulation clarifies how to determine the amount of waste at a waste facility for the purpose of determining when the occupier of the facility must pay the waste levy, in line with the EPA's current practices (this is specifically in relation to a breach of the authorised amount) provides that the EPA can require an occupier of a waste facility to engage an independent person approved by the EPA to conduct an audit, and prepare a report on, information provided, or required to be provided, in the facility's waste contribution monthly reports clarifies that the EPA's power to make estimations extends to estimations of waste received at a waste facility and expands the circumstances in which the EPA may estimate the amount of waste at, or received at, a waste facility clarifies the definition of 'scheduled waste disposal facility' revises the wording of certain waste levy exemptions updates the table on operational purposes deductions from the waste levy to remove certain specifications, remove certain kinds of waste and add several new kinds of waste makes a minor amendment and includes savings and transitional provisions. The amendments on operational purposes deductions commence on 1 June 2023. All other amendments in the Regulation commenced on 2 March 2023.	N/A	N/A
August 2023	Yes	No updates	N/A	N/A	N/A
Jun-23	Yes	No updates	N/A	N/A	N/A
Jul-23	Yes	No updates	N/A	N/A	N/A
Sep-23	Yes	No updates	N/A	N/A	N/A

Summary of Applicable Legislation

Legislation listing updated **April 2023**

	Act	Administrative Authority	Inclusions	Comment
Commonwealth Legislation	*Aboriginal and Torres Strait Islander Heritage Protection Act 1984*	Commonwealth Minister	Aboriginal Objects or Sites	
	Carbon Credits (Carbon Farming Initiative) Act 2011	Clean Energy Regulator	Energy	
	Environment Protection (Sea Dumping) Act 1981	Aust Department of Agriculture, Water and the Environment	Pollution & Hazardous Substances	
	Environment Protection and Biodiversity Conservation Act 1999	Aust Department of Agriculture, Water and the Environment	Planning and Development	
	National Greenhouse and Energy Reporting Act 2007	Aust Department of Agriculture, Water and the Environment	Energy	
	National Greenhouse and Energy Reporting Regulation 2008	Aust Department of Agriculture, Water and the Environment	Energy	
	Ozone Protection and Synthetic Greenhouse Gas Management Act 1989	Australian Refrigeration Council	Pollution	
National Strategies	*National Environment Protection (Ambient Air Quality) Measure*	National Environ Protection Council	Pollution & Hazardous Substances	
	National Environment Protection (Assessment of Site Contamination) Measure	National Environ Protection & Heritage Council and Department of Planning, Industry and Environment	Pollution & Hazardous Substances; Land Mgt	
	National Environment Protection (Diesel Vehicle Emissions) Measure	National Environ Protection Council	Pollution	
	National Environmental Protection (Movement of Controlled Waste between States and Territories) Measure	National Environ Protection Council	Pollution & Hazardous Substances	
	National Environmental Protection (National Pollution Inventory) Measure	National Environ Protection Council	Pollution & Hazardous Substances	
	Australian Weeds Strategy 2017 - 2027	Environment and Invasives Committee	Land Management	
	Australia's Strategy for Natura 2019 - 2030			
	Emissions Reduction Fund	Clean Energy Regulator	Energy	
State Legislation	*Biosecurity Act 2015*	Department of Planning, Industry and Environment	Biodiversity	
	Biodiversity Conservation Act 2016	Department of Planning, Industry and Environment	Biodiversity	
	Building Products (Safety) Act 2017	Department of Planning, Industry and Environment	Planning and Development	
	Contaminated Land Management Act 1997	Environmental Protection Authority	Land Management	
	Dams Safety Act 2015	Dams Safety NSW	Water	
	Dangerous Foods (Road and Rail Transport) Act 2008		Pollution & Hazardous Substances	
	Environmental Planning and Assessment Act 1979	Department of Planning, Industry and Environment	Planning and Development	
	Environmental Planning and Assessment Regulation 2021	Department of Planning, Industry and Environment	Planning and Development	
	Environmentally Hazardous Chemicals Act 2017	Environmental Protection Authority	Pollution & Hazardous Substances	
	Environmentally Hazardous Chemicals Regulation 2008	Department of Planning, Industry and Environment	Pollution & Hazardous Substances	
	Explosives Act 2003	SafeWork	Pollution & Hazardous Substances	
	Fisheries Management Act 1994	Department of Primary Industries	Biodiversity	
	Local Land Services Act 2013	Local Land Services	Land Management	
	National Environment Protection Council (New South Wales) Act 1995			
	National Parks and Wildlife Act 1974	Department of Planning, Industry and Environment	Cultural Heritage; Biodiversity	
	Natural Resources Commission Act 2003	Natural Resources Commission	Planning and Development	

Summary of Applicable Legislation

Legislation listing updated **April 2023**

	Act	Administrative Authority	Inclusions	Comment
	Ozone Protection Act 1989	Department of Planning, Industry and Environment	Pollution	
	Pesticides Act 1999	Department of Planning, Industry and Environment	Land Management	
	Protection of the Environment Operations (Clean Air) Regulation 2021	Department of Planning, Industry and Environment	Pollution & Hazardous Substances	
	Protection of the Environment Operations (General) Regulation 2021	Department of Planning, Industry and Environment	Pollution & Hazardous Substances	
	Protection of the Environment Operations (Noise Control) Regulation 2017	Department of Planning, Industry and Environment		
	Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019	Department of Planning, Industry and Environment	Pollution & Hazardous Substances	
	Protection of the Environment Operations (Waste) Regulation 2014	Department of Planning, Industry and Environment	Waste	
	Protection of the Environment Operations Act 1997	Department of Planning, Industry and Environment	Pollution & Hazardous Substances; Water; Waste	
	Radiation Control Act 1990		Pollution & Hazardous Substances	
	Roads Act 1993	Either the Transport for NSW, Local Council or the Minister for Roads and the relevant public authority	Planning and Development	
	Rural Fires Act 1997	NSW Rural Fire Service	Land Management	
	Rural Fires Regulation 2022	NSW Rural Fire Service	Land Management	
	Soil Conservation Act 1938	Department of Planning, Industry and Environment	Land Management	
	Waste Avoidance and Resource Recovery Act 2001	Department of Planning, Industry and Environment	Waste	
	Water Act 1912	Department of Planning, Industry and Environment	Water	
	Water Management Act 2000	Department of Planning, Industry and Environment, Natural Resources Access Regulator, Environment Protection Authority	Water	
	Water Management (General) Regulation 2018	Department of Planning, Industry and Environment	Water	
	Work Health and Safety Act 2011	SafeWork NSW	Pollution & Hazardous Substances	
	Work Health and Safety Regulation 2017	SafeWork NSW		
	Work Health and Safety Act (Mines and Petroleum Sites) 2022	Resources Regulator	Pollution & Hazardous Substances	
	Work Health and Safety Regulation (Mines and Petroleum Sites) 2022	Resources Regulator	Pollution & Hazardous Substances	
State Strategies and Policies	*Noise Policy for Industry 2017*	Department of Planning, Industry and Environment	Planning and Development; Noise	
	NSW Biodiversity Offsets Policy	*Environment, Energy and Science Group within the Department of Planning, Industry and Environment, Local Land Services and the NSW Biodiversity Conservation Trust.*		
	NSW Aquatic Biodiversity Strategy	WaterNSW	Water	
	NSW Water Conservation Strategy	WaterNSW	Water	
	NSW Rivers and Estuaries Policy	WaterNSW	Water and Biodiversity	
	NSW Groundwater Quality Management Policy	WaterNSW	Water	
	NSW Groundwater Quality Protection Policy	WaterNSW	Water	

Summary of Applicable Legislation

Legislation listing updated **April 2023**

	Act	Administrative Authority	Inclusions	Comment
	NSW Groundwater Dependent Ecosystem Policy	WaterNSW	Water and Biodiversity	
	NSW Aquifer Interference Policy	WaterNSW	Water	
	SEPP (State Significant Precincts) 2005	Independent Planning Commission	Planning and Development	
	SEPP 11 (Transport and Infrastructure) 2021	Department of Planning, Industry and Environment	Planning and Development	
	SEPP 33 Hazardous and Offensive Development	Department of Planning, Industry and Environment	Planning and Development	
	State Environmental Planning Policy (Three Ports) 2013	Department of Planning, Industry and Environment	Planning and Development	
	SEPP 55 Remediation of Land	Department of Planning, Industry and Environment	Planning and Development	
Local Legislation	*Local Government Act 1993*	Local Councils	Planning and Development	
	Development Control Plans (DCPs)	Local Councils	Planning and Development	
	Local Environmental Plans (LEP(s))	Local Councils	Planning and Development	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Planning and Development		
Commonwealth Legislation		
Environment Protection and Biodiversity Conservation Act 1999 (**EPBC Act**) Administered by the Department of the Environment (**DE**)	The EPBC Act contains provisions relating to assessment and approval, biodiversity conservation, compliance and enforcement. The assessment and approval provisions establish a Commonwealth process for assessment of proposed actions that are likely to have a significant impact on matters of national environmental significance. These matters include: • World Heritage properties; • Commonwealth Heritage properties; • Ramsar wetlands; • migratory species, threatened species, or ecological communities listed in the EPBC Act; • Commonwealth land, Commonwealth marine areas; • the Great Barrier Reef Marine Park; • Nuclear actions, including uranium mining; and • Water resources in relation to coal seam gas and large coal mining development.	There are several enforcement and compliance mechanisms established under the Act. These include injunctions, environmental audits, strict civil and criminal penalties, orders to remediate environmental damage, liability of executive officers and publicising of contraventions. The maximum penalty for unlawful action in relation to a matter of national environmental significance is $9 million or gaol of up to seven years.
Planning and Development		
State Legislation		

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Environmental Planning and Assessment Act 1979 (**EP&A Act**) Administered by the DPE and Independent Planning Commission	The EP & A Act governs land use planning in NSW and requires environmental impact assessments to be carried out and other approvals to be obtained before certain development can proceed. The major sections of the EP&A Act include: • Part 3 - Environmental Planning Instruments eg Local Environmental Plans, State Environmental Planning Policies and Development Control Plans. • Part 4 -Provides the assessment process for development which requires development consent under an environmental planning instrument. Development which is designated development will require an Environmental Impact Statement (**EIS**) to be prepared. • Part 4 - Division 4.7 (State significant development) - provides an assessment and approvals process for major projects where the Minister for Planning and Infrastructure is the approval authority. • Part 4 - Division 4.5 Certification of Development, makes provision for issue of construction certificate before construction works can lawfully commence.	It is an offence under the EP&A Act to breach the provisions of EP&A Act which carries different maximum penalties depending on which tier an offence relates to. Tier 1 offences carry a maximum penalty of $5 million and a further $50, 000 for each continuing day. Tier 2 offences carry a maximum penalty of $2 million and a further $20, 000 for each continuing day. Tier 3 offences carry a maximum penalty of $1 million and a further $10, 000 for each continuing day. Alternative sentencing options are available such as a court order to correct or restrain a breach. It is criminal offence under the EP&A Act to: • provide false or misleading information in a monitoring or audit report (tier 3 offence); or • fail to include information which is materially relevant in a monitoring or audit report (tier 3 offence); • fail to comply with a requirement of an authorised officer, obstruct or delay an authorised officer (tier 3 offence). Commencing construction works prior to beng issued a construction certificate (tier 1 or tier 2 offence).

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	• Part 5.2 (State significant infrastructure) – provides for an assessment and approval process for State significant infrastructure such as railways, roads and ports where the Minister for Planning and Infrastructure is the approval authority.	
	• Part 4.1 - Provides the assessment process for activities which do not require development consent under an environmental planning instrument. Activities which will have a significant effect upon the environment will require an EIS to be prepared if the development is designated development. The Independent Planning Commission is now the consent authority for certain State Significant Development. An additional definition has been introduced to the EP&A Act, being 'regionally significant development'.	Similar penalties apply where a person does not comply with the audit and compliance provisions in Part 9, Division 9.4.
Environmental Planning and Assessment Regulation 2000 Administered by the DOPI	The EP&A Regulation sets out a number of regulations and requirements in relation to the development of LEPs, DCPs, Contributions Plans and procedures relating to development applications including requirements for EISs and modifications to certain types of development. Proponents of development requiring development consent under Part 4 of the EP&A Act must consult with the DPE in regard to requirements for an EIS if it is designated development. The Regulation also sets out requirements in terms of public participation and post approval requirements. Coal works are listed as a designated development under Schedule 3 of the *EP&A Regulation 2000* , and therefore requires an Environmental Impact Statement (**EIS**) to accompany any Development Application.	It is an offence under the EP&A Regulation to provide false or misleading information in connection with a planning matter (s.285B).
Local Government Act 1993 Administered by local councils	Confers powers on local councils to regulate minor local government related matters such as sewage, water supply, waste and roads. Councils may issue orders in relation to health, safety and other matters under s. 124.	Failure to obtain a required approval, failure to comply with an approval or failure to comply with an order may result in a criminal penalty of 100 penalty units (s.626-628).
	The Roads Act sets out rights of member of the public to pass along public roads, establishes procedures for opening and closing a public road, and provides for the classification of roads.	A breach of the requirement to obtain a s.138 approval for works and structures on roads attracts a criminal penalty of 10 penalty units

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Roads Act 1993 (**Roads Act**) administered by either Transport for NSW, the Minister for Roads and Transport or local councils	Roads and Maritime Services has jurisdiction over freeways, the Minister over Crown roads and the local council over all public roads which are not freeways or Crown roads. The Roads Act requires proponents to obtain a s.138 approval to dig up and/or disturb the surface of a public road, and places the responsibility of restoring the road on the proponent.	(s.138).
Planning and Development		
Regional and Local Plans, Policies and Strategies		
Development Control Plans (**DCPs**) Administered by local Councils	DCPs are created under local council's Local Environmental Plans to fine-tune the development control process (eg, the height and scale of new buildings). The key DCP in operation in the local government area of Newcastle City Council is Newcastle Development Control Plan 2012, which should be read in conjunction with the technical manuals on the Council's web site.	
Local Environmental Plans (**LEP**(s)) – *Newcastle Local Environmental Plan 2012* Administered by Newcastle City Council	LEPs are a Local Council's primary Environmental Planning Instrument (**EPI**) to control development through land Zones and the Development Application process.	
Planning and Development		
State Plans, Policies and Strategies		
State Environmental Planning Policy (State Significant Precincts) 2005	This SEPP declares which development, in the opinion of the Minister, is development which is considered SSD under the EPA Act. Any modifications to former Part 3A projects will now be assessed under State Significant Development or State Significant Infrastructure pathways. Likewise any modifications to projects will now be assessed under SSD / SSI pathways under divisions 4.7 and 5.2 respectively.	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
State Environmental Planning Policy (Three Ports) 2014	SEPP (Three Ports) replaced arrangements in SEPP (State Significant Precincts) for Newcastle Port. SEPP (Three Ports) outlines, amoung other things, permitted or prohibited development, exempt and complying development and Land Zone Uses in relation to Newcastle Port. Port Facilities' include, amongst other things, the following: *facilities for the embarkation or disembarkation of passengers onto or from any vessels, including public ferry wharves *facilities for the loading or unloading of freight onto or from vessels and associated receival, land transport and storage facilities *refuelling, launching, berthing, mooring, storage or maintenance facilities for any vessel *administration buildings, communication, security and power supply facilities, roads, rail lines, pipelines, fencing, lighting or car parks	
State Environmental Planning Policy (Infrastructure) 2007	This SEPP deals with a wide range of State infrastructure, such as telecommunications facilities, sewerage works and storm water management, and specifies when development consent is (and is not) required for such development to be carried out in certain zones. Division 13 of Part 3 of this SEPP sets out what development on Port, wharf and boating facilities is either exempt, permissible without consent or permissible with consent. Note that SEPP (Infrastructure) does not apply to land within the Port of Newcastle Lease Area under SEPP (Three Ports). This SEPP also sets out development to be considered regionally significant development.	
SEPP 33 Hazardous and Offensive Development	This SEPP requires the consent authority to consider whether a proposed industrial development is potentially hazardous or offensive.	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
SEPP 55 Remediation of Land	SEPP 55 aims to provide a State-wide planning approach to the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the State, defines when consent is required, requires all remediation to comply with standards, ensures land is investigated if contamination is suspected, and requires councils to be notified of all remediation proposals.	
Cultural Heritage		
Commonwealth Legislation		
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	The aim of this Act is to protect areas and objects that are of particular significance to Aboriginal people in accordance with Aboriginal tradition. The Act operates concurrently with State and Territory laws. In all cases the Commonwealth Minister will need to be shown that the area or object is significant with respect to Aboriginal culture and is under threat of injury or desecration. The Minister must determine whether State law could be used to provide protection or assessment prior to making a declaration.	
Australian Heritage Council Act 2003	This Act repealed the Australian Heritage Commission Act 1979 and provides for the protection of heritage by listing places on the National Heritage List. The National Heritage List will record the natural, Indigenous and historic places with outstanding heritage value. This Act also retains the listings on the Register of the National Estate.	
Native Title Act 1993	Preserves native title on land over which native title was not extinguished prior to 1 January 1994 and sets up procedures for determining whether native title exists.	
Cultural Heritage		
State Legislation		
Heritage Act 1977	The Act aims to protect and conserve cultural (historic heritage) such as buildings, works, relics or places greater than 50 years old and considered to be of significance. Mechanisms to protect and conserve historic heritage include issuing 'interim heritage orders' or listing on the State Heritage Register.	It is an offence to disturb items on the State Heritage Register or those subject to interim heritage orders without a permit. Further, it is considered an offence to let a building or work which is subject to a conservation instrument

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Administered by the NSW Heritage Council	Requires an excavation permit prior to disturbance of such sites (s.139). There is also a duty to inform the Heritage Council if a relic is found or its location is known.	fall into disrepair for the purpose of enabling demolition, enabling the development of land on which the building is located or land adjoining the building or work. Penalties can include prosecution, financial penalties and/or imprisonment. The maximum penalty that a person may be liable for is up to $1.1 million and/or 6 months jail (s.157). This may include directors or employees of a corporation.
National Parks and Wildlife Act 1974 Administered by Office of Environment and Heritage (**OEH**)	The Act is the principle legislation dealing with the management of Aboriginal heritage in NSW. It provides for the protection, preservation and management of all Aboriginal objects throughout NSW, irrespective of land tenure. Anyone who discovers an object must report that discovery to the National Parks and Wildlife Service (**NPWS**) within a reasonable time unless that person has reason to believe that the NPWS already knows of its existence.	Under s.86 of the Act, it is an offence to knowingly harm or desecrate an Aboriginal object without the prior written consent of the Director-General of the NPWS. Fines up to $550,000 , imprisonment for 2 years or both may be imposed on individuals,. Fines of up to $1,100,000 may be imposed on corporations. Likewise, under s.98, it is an offence to harm protected fauna, other than threatened species, endangered populations or endangered ecological communities. This offence carries a fine of up to $11,000 with an additional $1,100 in respect of each animal that is harmed or imprisonment for 6 months, or both.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	Sites of traditional significance which do not necessarily contain material remains may be gazetted as Aboriginal Places and thereby be protected under the Act. The owner or lessee of land on which Aboriginal objects or places are present can enter into a 'conservation agreement' with the NPWS to assist with the protection and management of this heritage or have the land on which it is situated declared an 'Aboriginal place' or a 'protected archaeological area'. Lands may be acquired by the NPWS for the purpose of protecting and preserving important objects.	
Land Management		
National Policies and Strategies		
Australian Weeds Strategy 2017 - 2027	The Australian Weeds Strategy provides a national framework for addressing weed issues whilst maintaining the profitability and sustainability of Australia's primary industries and the reducing the impact of weeds on the environment	
Land Management		
State Legislation		
Contaminated Land Management Act 1997 (NSW) Administered by the Environmental Protection Authority (**EPA**) and OEH	The Act attaches liability for contaminated land firstly to the person who caused the contamination, however, if this person cannot be held liable then the owner of the land, followed by the notional owner (such as a mortgagee) will be held liable and then the local authority. The Act grants EPA the power to issue management orders requiring the appropriate person to remediate contaminated land if it is believed that a site is 'significantly contaminated'. The EPA also has the authority to order an investigation of land believed to be contaminated. Under s.60 of the Act both, a person whose activities have caused contamination, and the owner of the land that has been contaminated have a duty to notify the EPA.	Under s .103 of the Act it is an offence under the Act to make false or misleading statements in regard to information provided in relation to the Act. This offence carries a maximum penalty fine of $250, 000 for individuals and $1, 000, 000 for corporations. Proceedings for an offence will be dealt with either in a local court or the Land and Environment Court (see Part 10). Civil proceedings can also be lodged to remedy or restrain breaches of this Act (enforceable undertakings)

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Biodiversity Conservation Act 2016	This Act replaced the Native Vegetation Act 2003 and Native Vegetation Regulation in its entirety. The Act sets a framework for, amonng other things, protection of animals and plants, biodiversity conservation licenses, procedure for listing species and ecological communities, biodiversity stewardship agreements, conservation agreements, wildlife refugee agreements, biodiversity offset scheme, biodiversity certification of land and public consultations relating to biodiversity conservation.	Offences under this Act primarily relate to a failure to protect or conserve certain plant and animal species and ecological communities. Tier 1 offences carry a maximum penalty of $1, 650, 000 and a further $165, 000 for each day/occasion the offence continues. Tier 2 offences carry a maximum penalty of $660, 000 and a further $66, 000 for each day/occassion the offence continues. Tier 3 offences carry a maximum penalty of $440, 000 and a further $44, 000 for each day/occassion the offence continues. Tier 4
Natural Resources Commission Act 2003 Administered by Natural Resources Commission (**NRC**)	The object of this Act is to establish the NRC for the purpose of, amongst other things: • establishing a scientific basis for the management of natural resources in the social, economic and environmental interests of the State; • enabling the adoption of State-wide standards and targets for natural resource management issues; and • advising on the circumstances in which broad scale clearing is to be regarded as improving or maintaining environmental outcomes.	
Local Land Services Act 2013 Administered by Local Land Services	Aamendments have been introduce that primarily relate to clearing of native vegegation and how to gain approval for such activities if not authorised under another Act. The amendments also repeal the Native Vegetation Act 2003. The Act establishes 11 regional Local Land Services. The object of the Act, amongst other things, is to establish a statutory corporation (to be known as Local Land Services) responsible for management and delivery of local land services in the social, economic and environmental interests of the State in accordance with any State priorities for local land services. The role of the Local Land Services include: • to administer, deliver or fund local land services; • to develop and implement appropriate governance arrangements for the delivery of local land services;	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	• to prepare a State strategic plan to set the vision, priorities and strategy in respect of the delivery of local land services in the region, with a focus on appropriate economic, social and environmental outcomes; and • to provide and administer grants, loans, subsidies or other financial assistance for activities in relation to local land services.	
Biosecurity Act 2015 Administered by the Department of Primary Industries (**DPI**)	Imposes a duty to prevent, eliminate or minimise biosecurity risk posed by weeds on land occupied by the company.	An occupier of Land under Part 3 of the Act has a duty to prevent, eliminate or minimise any biosecurity risk posted or likely to be posed by weeds on that land (Sch 1).
Pesticides Act 1999 Administered by the EPA	The Act regulates the registration and application of pesticides. Its aim is to protect health, the environment, property and trade while safeguarding responsible pesticide use by reducing the risks associated with pesticide use. It requires that pesticides are used according to instructions on the label or permit and that for each use actions are taken to ensure appropriate application (note that this may require record keeping. The EPA enforces the proper use of all pesticides in NSW, after the point of sale. The Act makes it illegal to disregard the label instructions on a registered pesticides and requires that a person must not keep a A relatively new feature of the *Pesticides Act 1999* is that an authorised officer under the Act may issue a penalty notice for less serious offences and those that do not cause serious harm, rather than commence	Under the Act it is an offence to use a pesticide in a way that causes: • injury or likely injury to another person; • damage or likely to cause damage to another person's property; or • harm to a non-target plant or animal. Penalties include fines for breaches of up to $60,000 for individuals and $120,000 for corporations (s.101). A failure to comply with an order under the Act can also result in fines of $60,000 for individuals and $120,000 for corporations for each day the offence continues.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Rural Fires Act 1997 and *Rural Fires Regulation 2013* Administered by the NSW Rural Fire Service	These statutory instruments regulate the management of bushfires and controlled burning. Owners and occupiers of land are required to take all practical steps to prevent bushfires and minimise the danger of the spread of bushfires on or from land under its control. During bushfire danger periods, land owners and occupiers are required to extinguish fires burning on their land if possible or notify the Fire Brigade as soon as possible. A permit must be obtained to light fires for land clearance or fire breaks during bushfire danger periods.	Failure to comply with certain provisions under the Act carry a fine of up to $5,500 or imprisonment for 12 months or both (see for eg, ss.86-88). Failure to extinguish a fire or notify the Fire Brigade carries a penalty of up to $2,200 or imprisonment for 6 months or both (s.64) A notice in writing may be issued requiring the occupier or owner of land to carry out bush fire hazard reduction work. Failure to comply with such a notice carries a fine of up to $5,500 or imprisonment for 12 months.
Soil Conservation Act 1938 Administered by OEH	A notice may be served under Part 4, s.22, of the Act requiring actions to mitigate or avoid soil erosion, siltation or land degradation associated with proclaimed works (s.19) and catchment areas (s.20).	
Land Management		
Regional and Local Plans, Policies and Strategies		
Catchment Management Blueprints Administered by the Hunter Central Rivers CMA	The Hunter Central Rivers Catchment Management Authority has recently revealed a new Hunter Central Rivers Catchment Action Plan for 2013-2023. The new plan is intended to provide guidance on investment across the region, with a focus on achieving healthy and productive catchments, through ecologically sustainable development, for the benefit of present and future generations. In particular, it sets out 10 common goals for the catchment community in the region. These goals include : • governance and planning; • knowledge and research; • empowerment and capacity building;	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	• land and soils; • freshwater; • biodiversity; • air; • estuaries and marines; • community wellbeing; and • economic prosperity.	
Water		
State Legislation		
Dams Safety Act 2015 Administered by the Dams Safety Committee	The Act will replace the Dam Safety Act 1978 in its entirety. 'Prescribed dams' under the old Act are now taken to be 'declared dams' under the Dam Safety Act 2015. The owner of a 'declared dam' is required to publish on an annual basis a report demonstrating the owner's compliance with the dams safety standards. Such safety standards will be elaborated in the Act's corresponding regulation.	The owner must comply with the safety standards of a 'declared dam' (s. 14). Non-compliance with safety standards can result in a maximum penalty of $1,100,000 and a further $132,000 for each day the offence continues. There are also offences carrying the same maximum penalty as above, for not preparing operations and maintenance plans and emergency plans for 'declared dams'. Proccedings for offences under the Act may be dealt with summarily in either the Local Court or Land and Environment Court
Water Act 1912	The Act regulates the issuing of permits and licences to extract or discharge water for any work.	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Administered by DPI – Office of Water and WaterNSW	The licence and permit provisions of the *Water Management Act 2000* (**WMA**) now apply to water sources which are comprised in a gazetted water sharing plan. On 1 July 2004 the Water Sharing Plan – Hunter Regulated River Water Source was gazetted and commenced. The Plan was replaced in its entirety on 1 July 2016 and is due for extension or replacement in July 2026. The provisions in the Water Sharing Plan provide for water to support the ecological processes and environmental needs of the river, and direct how the water available for extraction is to be shared. This Plan sets rules that affect the management of water access licences, water allocation accounts, the trading of or dealings in licences and water allocations, the extraction of water, the operation of dams and the management of water flows. On 1 August 2009 the Hunter Unregulated and Alluvial Water Sharing Plan commenced This Plan includes rules for protecting the environment, extractions, managing licence holders' water accounts and water trading.	
Water Management Act 2000 Administered by WaterNSW and Natural Rescources Access Regulator	The WMA commenced on 1 January 2001 and is administered by DPI. The Act incorporates the provisions of a number of previous Acts that relate to the management of surface and groundwater in NSW.The WMA commenced on 1 January 2001 and is administered by DPI and WaterNSW. The Act incorporates the provisions of a number of previous Acts that relate to the management of surface and groundwater in NSW. Note there were new changes introduced to the Act as of 1 January 2015. These changes were made in regards to regulated river supplementary licenses, harvestable rights, new offence for taking of water, licensing and trading processes, granting combined approvals and floodplain harvesting access licenses. The Act aims to provide a single statute for the regulation of water and works that affect surface and groundwater, both fresh and marine.	Under the Act there are specific enforcement powers in favour of the Minister including 'stop work orders'. Major offences such as using water without a water use approval, constructing or undertaking a water management work without a water management work approval, and the unlawful taking of water carry maximum penalties of $2,200,000 if committed by a corporation and $1,100,000 if committed by individuals (see: ss.60A to 60H). There are also further fines for each day that the offence continues. Minor offences relate to unlicensed bore drilling, exposure of underground pipes, work done by unqualified persons, obstruction and false and misleading information.
Water Management (General) Regulation 2011	The Regulation provides further particulars in relation to, amongst other things:	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Administered by WaterNSW and Natural Rescources Access Regulator	• access licences (Part 2); • approvals (Part 3); • fees and charges under the Act; and • penalty notice offences. Natural Resources Access Regulator (NRAR) is the new regulator for this Regulation and corresponding Act. NRAR is set up to regulate and ensure effective, efficient, transparent and accountable compliance and enforcement measures for natural resources management legislation.	
Water		
State Policies and Strategies		
NSW Water Conservation Strategy	The NSW government has introduced measures that promote the efficient use of water and its conservation by all water users. Sydney Water has introduced a Water Conservation Strategy for 2010 to 2015.	
NSW Rivers and Estuaries Policy	The State Rivers and Estuaries Policy provides a framework for river management throughout NSW, and guides the Department of Natural Resources in its assessment of all riverine corridor activities. The Policy objectives state: 'that rivers and estuaries of New South Wales are to be managed in ways which: • slow, half or reverse the overall rate of degradation in the systems; • ensure the long term sustainability of their essential biophysical functions; and • maintain the beneficial use of these resources'.	
NSW Groundwater Quantity Management Policy	The objectives of the NSW Groundwater Quantity Management Policy are as follows: • to achieve the efficient, equitable and sustainable use of the State's groundwater; • to prevent, halt, or reverse degradation of the State's groundwaters, and their dependent ecosystems; • to provide opportunities for development which generate the most cultural, social and economic benefits to the community, region, State and nation, within the context of environmental sustainability; and	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	• to involve the community in the management of groundwater resources.	
NSW Groundwater Quality Protection Policy	The State Groundwater Quality Protection Policy has objectives to encourage the ecologically sustainable development and management of the State's groundwater resources so as to: 1. slow and halt, or reverse, and degradation of groundwater resources; 2. ensure sustainability of groundwater-dependent exosystems; 3. maintain the range of beneficial uses of these resources; and 4. maximise economic benefit to the Region, State and nation. This policy specifically relates to groundwater quality.	
NSW Groundwater Dependent Ecosystem Policy	The State Groundwater Dependent Ecosystem Policy has the following five principles: (a) groundwater dependent ecosystems can have important value for scientists, groundwater managers, groundwater users, ecosystem managers and the wider community. These values and how threats (b) groundwater extractions should be managed within the sustainable yield of the aquifer system, so that the ecological processes and biodiversity are maintained and/or restored. This (c) priority should be given to ensuring that sufficient groundwater of sustainable quality is available at times when it is needed: • for protecting ecosystems which are known to be, or are most likely to be, groundwater dependent; and • for ecosystems which have an immediate or high degree of threat. (d) where scientific knowledge is lacking, the precautionary principle should be applied to protect groundwater dependent ecosystems. The development of adaptive management systems and (e) planning, approval, and management of developments and land use activities should aim to minimise adverse impacts on groundwater systems by: • maintaining natural patterns of recharge and not disrupting groundwater levels that are critical for ecosystems;	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	• not polluting of causing changes in groundwater quality; and • rehabilitating degraded groundwater systems where possible'. This Policy relates specifically to the protection and management of groundwater dependent ecosystems.	
NSW Aquifer Interference Policy	The NSW Aquifer Interference Policy defines the regime for protecting and managing the impacts of aquifer interference activities on NSW's water resources. The Policy has three key planks: to ensure all water taken is properly account for; address minimal impact considerations for impacts of activities on the water table, water pressure and water quality; and plan for measures in the event that actual impacts are greater than predicted.	
Waste		
State Legislation		
Protection of the Environment Operations Act, 1997 (**POEO Act**) *Protection of the Environment Operations (General) Regulation 2009*		It is an offence to pollute any waters. A corporation guilty of polluting water can receive a penalty up to 1,000,000 and $120,000 for each day the offence continues. An individual faces a maximum penalty of $250,000 and $60,000 for each day the offence continues.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Administered by the EPA	• The POEO Act regulates and provides penalties for environmental offences in NSW. These environmental offences include water pollution, air pollution, pollution of land, noise pollution, waste offences, other leaks and spillages and the carrying out of a 'scheduled activity' (which includes coal works and shipping in bulk) without a licence. The *Protection of the Environment Operations (General) Regulation 2009* also applies. A protocol has been introduced to this regulation, the *Protocol for calculating monetary benefits* , prepared by the EPA which assists to determine an amount representing the monetary benefit acquired by a person or company as a result of committing an offence under this Act or Regulation (s.101A).	It is an offence to pollute air. Air pollution offences can result in a fine of $1,000,000 and $120,000 for each day the offence continues for a corporation. In the case of an individual, the penalty can be up to $250,000 and, $60,000 for each day the offence continues. It is also an offence to cause noise pollution. The maximum penalty for noise pollution is up to $1,000,000 for a corporation and $120,000 for each day the offence continues. For individuals, the maximum penalty is $25,000 and $60,000 for each day the offence continues. It is an offence to pollute land. In the case of a corporation, this can result in a penalty up to $1,000,000 and $120,000 for each day the offence continues. In the case of an individual, a penalty of up to $250,000 and $60,000 for each day the offence continues. It is an offence to unlawfully transport or deposit waste. If a person transports waste to a place that cannot lawfully be used as a waste facility for that waste, or causes or permits waste to be so transported then the person and the owner of the waste may be guilty of a waste offence. The maximum penalty for this offence in the case of a corporation is $1,000,000 and in the case of an individual is $250,000.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
		A person is guilty of a spillage offence if the person wilfully or negligently causes any substance to leak, spill or otherwise escape in a manner that harms or is likely to harm the environment. A corporation guilty of this offence can receive a penalty up to $5,000,000 for an offence that is committed wilfully or $2,000,000 for an offence that is committed negligently. An individual found guilty of this offence can receive a penalty up to $1,000,000 or 7 years' imprisonment, or both, for an offence that is committed wilfully or $500,000 or 4 years' imprisonment, or both, for an offence that is committed negligently.
Protection of the Environment Operations (Waste) Regulation 2014 Administered by the EPA	This Regulation aims to: • provide a single waste tracking system; • streamline requirements relating to waste transporting applicable to both licensed and non-licensed persons; and • achieve reduced waste generation and increased through the composition of increasing waste levies. This Regulation includes requirements relating to waste tracking obligations on producers, consignors, transporters and receivers of waste, as well as producers agents. It also includes requirements for proper record keeping and consignment authorisations.	An offence against the Regulation is classified as a Tier 2 offence and can result in a maximum fine of 200 penalty units for a corporation, and 100 penalty units for an individual
Waste Avoidance and Resource Recovery Act 2001	The Act aims to facilitate the efficient use of resources to reduce the amount of waste generated and the amount of waste requiring disposal. It sets out the planning priorities and the methods by which they are to be achieved. Part 5 of the Act introduces a new container deposit scheme.	Any regulations made under the Act may create offences punishable by fines up to 200 penalty units for an individual and 400 penalty units for a corporation (s 56) .

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Administered by the EPA	The Act aims, amongst other things, to: minimise the consumption of natural resources; encourage resource recovery; provide for the continual reduction in waste generation; and minimise the final disposal of waste.	No such regulations have been made as yet.
Pollution and Hazardous Substance Management Legislation		
Commonwealth Legislation		
Ozone Protection And Synthetic Greenhouse Gas Management Act 1989 *Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995* Administered by (**DE**)	Under this Act any person who handles refrigerant gases where there is a risk of emission (either ozone depleting substances or synthetic greenhouse gases) will require a national Refrigerant Handling Licence. Handling refrigerant gases without a licence is an offence. Any person or company who buys or sells a regulated gas will be required to hold a national Authorisation. For most people this will be a Refrigerant Trading Authorisation. After signing the Montreal Protocol, Australia has introduced hydrofluorocarbon (HFC) phase-down obligations which is a gradual reduction in the maximum amoutn of HFCs permitted to be imported into Australia. PWCS will only need to be aware of thise phase-down if it intends to import HFCs to be used in its machinery.	It is offence to operate without a licence or in contravention of licence conditions. This is punishable with a fine of up to 500 penalty units (s.18).
Environment Protection (Sea Dumping) Act 1981	This Act provides for the protection of the environment by regulating dumping into the sea, incineration at sea and artificial reef placements.	It is an offence (other than in accordance with a permit) to dump or incinerate controlled material, a vessel, aircraft or platform into or on Australian waters. This is punishable with a term of imprisonment of up to 10 years and/or a fine of up to 2000 penalty units (ss.10A - 10B). Similar maximum penalties apply where a person loads controlled material for the purpose of dumping or incineration (s 10C).

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Pollution and Hazardous Substance Management Legislation		
State Legislation		
Work Health and Safety Act 2011 *Work Health and Safety Regulations 2011* Administered by WorkCover	Among other things, the Act and Regulations prescribe a licensing regime for 'major hazard facilities' (Regulations, Part 9) and imposes a general obligation to ensure that flammable or combustible substantaces are kept at the lowest practicable quantity for the workplace (clause 53).	
Work Health and Safety Act (Mines and Petroleum Sites) 2011 *Work Health and Safety (Mines and Petroleum Sites) Regulations 2011* Administered by Resources Regulator	This Act and Regulation is principally aimed at managing hazards from a health and safety perspective. However, the Regulations do impose certain obligations to monitor environmental factors such as air quality and exposure to dust (cls 38, 40); identify principal hazards on sites (s 23); and maintain safe levels of airbourne contaminants (cl 54). A mine operator is no longer required to monitor health of workers rather, the Regulator may now direct health monitoring to be provided to workers (s.109).	There are a range of offences for failing to comply with the Act and Regulation. The maximum possible penalty for a corporation is $30,000 under the Regulations.
Environmentally Hazardous Chemicals Act 1985 Administered by the EPA	Assesses and controls environmentally hazardous chemicals and chemical waste through a Hazardous Chemicals Advisory Committee that advises the EPA. The EPA is granted the power to declare substances to be chemical wastes, for example, declared substances include dioxin contaminated waste materials and polychlorinated biphonyls (**PCB**s) wastes. The EPA may issue chemical control orders (**CCO**s) that regulates how the waste is to be disposed. These CCOs may regulate activities such as the manufacture, processing, conveying, buying, selling, or disposal of the chemical or declared waste. Chemicals for which a CCO has been made are referred to as environmentally hazardous chemicals. CCOs can prohibit specified activities, prohibit activities that do not comply with the conditions of the order, permit an activity unconditionally, or prohibit activities without a licence.	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Environmentally Hazardous Chemicals Regulation 2008 Administered by EPA	The stated object of the Regulation is to remake, with some amendments, the Environmentally Hazardous Chemicals Regulation 1999, which was repealed on 1 September 2008 by s.10(2) of the *Subordinate Legislation Act 1989* . This Regulation, makes provision with respect to the following: '(a) the matter to be included in certain applications and notices made or issued under the Act; (b) the time within which appeals under the Act are to be made; (c) the form of a receipt for property seized by authorised officers and the manner of advertising the proposed forfeiture of seized property; (d) the information to be included in registers under the Act; (e) the appointment of alternate members of the Hazardous Chemicals Advisory Committee; (f) the payment of fees; and (g) savings and formal matters'.	
	The object of this Act is to establish and make provision for the operation of the National Environment Protection Council to ensure: (a) people enjoy the benefit of equivalent protection from air, water or soil pollution and from noise, wherever they live in Australia, and (b) decisions of the business community are not distorted, and markets are not fragmented, by variations between participating jurisdictions in relation to the adoption or implementation of major environment protection measures. The Council has the following functions: (a) to make national environment protection measures (**NEPM**s); and (b) to assess and report on the implementation and effectiveness, in participating jurisdictions, of national environment protection measures The Council has the power to make NEPMs that relate to the following: • Ambient Air Quality;	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
National Environment Protection Council (New South Wales) Act 1995	• Ambient marine, estuarine and fresh water quality; • The protection of amenity in relation to noise; • General guidelines for the assessment of site contamination; • Environmental impacts associated with hazardous wastes; • The re-use and recycling of used materials; and • Motor vehicle noise and emissions. The current NEPM's include: • Air Toxics; • Ambient air quality; • Assessment of Site Contamination; • Diesel Vehicle Emissions; • Movement of Controlled Waste; • National Pollutant Inventory; and • Used Packaging Materials. NEPMs which are currently under development include: • product stewardship; and • relevant NEPMs are discussed in the strategy and policy section of Pollution and Hazardous Substance Management.	
Ozone Protection Act 1989 Administered by EPA	The Act provides a broad power to make regulations to control or prohibit the production and use of substances that deplete stratospheric ozone when emitted into the atmosphere and articles that contain or use those substances in their operation.	It is a Tier 1 offence (Tier 1 offences are considered to be the most serious environmental offences) under s.117 of the POEO Act to wilfully or negligently cause certain ozone-depleting substances to be
Protection of the Environment Operations Act 1997		Pollution offences are divided into three tiers.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Administered by EPA	The POEO Act allows the EPA to licence certain polluting activities by issuing environment protection licences; creates a range of offences and penalties for pollution; provides mechanisms for the EPA and local government to enforce pollution controls; and provides mechanisms for the public to enforce pollution laws. Environment protection licences are required for 'scheduled activities' which have significant environmental impacts, 'scheduled development work' and the control of 'non-scheduled' activities in order to regulate pollution from those activities. One licence can be issued to cover several forms of pollution. Schedule 1 of the POEO Act lists activities for which an environment protection licence is required. Coal works are listed in Schedule 1 as an EPA-licensed activity.	**Tier 1:** These are the most serious and cover certain waste disposals, leaks, spillage and other escapes, and ozone depleting emissions. The penalty is up to $5,000,000 for corporations and $1,000,000 and/or 7 years jail for individuals for 'wilful or negligent disposal of waste causing or likely to cause harm to the environment, wilfully or negligently causing a substance to leak, spill or otherwise escape and the wilful or negligent emission of an ozone-depleting substance in breach of the Ozone Protection Act' (s.119). **Tier 2:** Are all other offences under the Act. They carry a penalty of up to $2,000,000 for corporations and $500,000 for individuals (see for eg, s.132). It consists of other offences under the Act and Regulation, involves water, air and noise pollution and waste offences. Involves strict liability - ie no proof of intent required.
	The POEO Act imposes a duty to notify listed regulatory authorities 'immediately' upon becoming aware of a incident where material harm to the environment is caused or threatened. This notification threshold of 'immediately' has been raised from 'as soon as practicable' as was previously in place. Liability may extend to: • Owners of land and premises • Occupiers of land and premises • Persons in control of or concerned in the management of potentially polluting processes	**Tier 3:** Are Tier 2 offences that are capable of being dealt with under Part 8.2 of the Act, albeit by way of a penalty notice. In addition to these tiered pollution offences, failure to notify of pollution incidents is an offence. The maximum penalty is: • $2,000,000 plus $240,000 for each day the offence continues, for corporations; and • $500,000, plus $120,000 for each day the offence continues, for individuals (s.152). Where the EPA issues a clean up notice, a fee will also be charged.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	The concept of 'material harm' under the Act includes actual or potential harm to the health or safety of human beings or ecosystems that is not trivial or that results in actual or potential loss or property damage to an amount of $10,000 (s.147).	
	Amendments to this Act have created specific offences relating to the emission of odours from scheduled premises in addition to other general air pollution offences. Specifically, these new sections provide that an It will be a defence to a contravention of this section if the emission is identified in the relevant environment protection licence and was emitted in accordance with the conditions directed at minimising the odour.	Maximum penalties for contravention of these provisions range up to $1,000,000 for corporations plus $120,000 for each day the offence continues (s.132).
Protection of the Environment Operations (Clean Air) Regulation 2010 Administered by the EPA	The POEO Clean Air Regulations now make provision for plant, equipment and: • sets maximum limits on emissions from activities and plant for a number of substances including chlorine, dioxins, furans, smoke, solid particles and sulphur; • deals with transport and storage of volatile organic liquids; • restricts the use of high sulphur liquid fuel; and imposes operational requirements for certain afterburners, flares, vapour recovery units and other treatment plant. Part 2 of the Regulations sets out the requirements relating to domestic solid fuel heaters. Part 3 of the Regulations deals with the control of burning generally and in local government areas. The burning of certain articles are prohibited. The burning of articles in the open or in an incinerator is also prohibited unless the fires or incinerators has been given approval under the Regulations.	There are offence provisions relating to vehicles emitting excessive air impurities, with fines of up to 200 penalty units for individuals and 400 penalty units for corporations. Other offences exist for use of motor vehicles not fitted with prescribed anti-pollution devices. An occupier of premises on which any Group 6 treatment plant, that is flares etc., is operated must ensure that the requirements in clauses 50, 51 and 52 are complied with. The maximum penalty for a corporation is 400 penalty units and 200 penalty units for an individual.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	Part 4 of the Regulations controls the emission of air pollution by motor vehicles. In particular the Regulation contains provisions relating to tampering with and maintaining vehicle anti-pollution devices. It requires diesel vehicles over 4.5 tonnes to be fitted with complying exhaust pipes. Exemptions exist for vehicles that comply with the emission standards of Australian Design Rule 80/01 and others.	
Protection of the Environment Operations (General) Regulation 2009 Administered by the EPA	The Regulation contains provisions relating to, amongst other things: • environment protection licences, including the calculation of administrative and load-based licence fees; • the definition of 'water pollution' and exemptions from the offence of polluting waters under the POEO Act; • compliance with the National Environment Protection (**NPI**) Measure made under the *National Environment Protection Council Act 1994* (Cth); • vehicle testing and inspection requirements in accordance with a notice given under s.207 of the Act; • the issuing of penalty notices under the Act and certain related environmental legislation; • the appropriate regulatory authority for certain type of activities; • exemptions from certain provisions of the Act; • the prohibition on the burning of native forest in any electricity generating work; • fees for environmental protection notices; • notification requirements for pollution incidents; • the evaluation of green offset schemes or green offset works; and • matters to be included in the public register kept under s.308 of the Act.	In conjunction with the Regulation, offences exist under the Protection of the POEO Act for failure to keep or provide data, and for providing false or misleading data in report of up to $1,000,000 for corporations, and $250,000 for individuals (s.113).

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002	This Regulation established a tradeable emission scheme to provide for the management of discharges of saline water into the Hunter River catchment. It requires a discharge licence (EPL) to authorise the discharge of saline water into the Hunter River catchment from an authorised discharge point or points.	It is an offence to fail to comply with any condition of a licence (s 64 of the POEO Act). The maximum penalty for a corporation is $1,ooo,ooo (plus $120,000 for each day the offence continues). It is also an offence to pollute any waters (s 120 of the POEO Act). The maximum penalty for a corporation is $1,000,000 (plus $120,000 for each day the offence continues).
Radiation Control Act 1990 and *Radiation Control Regulation 2013* Administered by the EPA	The objects of the Act are: · to secure the protection of persons and the environment from exposure to ionising radiation, and harmful non-ionising radiation, to the maximum extent that is reasonably practicable, taking into account social and economic factors and recognising the need for the use of radiation for therapeutic purposes: · to protect security enhanced sources from misuse that may result in harm to people or the environment; and · to promote the radiation protection principles. The Act requires those who use, sell or give away any radioactive substances, ionising radiation apparatus or non ionising apparatus to be licensed. The Regulation deals with the licensing of persons to use certain radioactive substances and radiation apparatus.	It is an offence not to hold a licence when necessary or not to comply with the conditions of the license. The maximum penalty is 250 penalty units or imprisonment for 2 years, or both (s 7).
Dangerous Goods (Road and Rail Transport) Act 2008 Administered by the EPA and WorkCover NSW	The *Dangerous Goods (Road and Rail Transport) Act 2008* regulates the transport of dangerous goods by road and rail. Its stated objective in s 3 is: 'to regulate the transport of dangerous goods by road and rail in order to promote public safety and protect property and the environment'.	It is an offence under s.23 to obstruct or intimidate authorised officers and others exercising functions under Act. The maximum penalty is 500 penalty units for a corporation; or 100 penalty units or imprisonment (or both) for an individual. Part 2 of the Act also contains a number of licensing and safety obligations. Failure to comply with these obligations may result in a fine for individuals of up to 500 penalty units and / or 2 years imprisonment, and up to 2,500 penalty units for corporations.
Dangerous Goods (Road and Rail Transport) Regulation 2014	The Regulation provides for the licensing of both vehicles and drivers transporting dangerous goods.	The regulation requires compliance with the Australian Dangerous Goods Code in relation

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Administered by the EPA and WorkCover NSW	The main objectives of the regulation are: (a) to set out the obligations of persons involved in the transport of dangerous goods by land transport; (b) to reduce as far as practicable the risks of personal injury, death, property damage and environmental harm arising from the transport of dangerous goods by land transport; (c) to give effect to the standards, requirements and procedures of the ADG Code so far as they apply to the transport of dangerous goods by land transport; and (d) to promote consistency between the standards, requirements and procedures applying to the transport of dangerous goods by land transport and other modes of transport.	to various aspects of the transport of dangerous goods.
Protection of the Environment Operations (Noise Control) Regulation 2008 Administered by the EPA	The Regulation controls noise from motor vehicles and marine vessels and sets community standards on acceptable noise intrusion in homes.	The Regulation makes it an offence for all vessels being used on navigable waters to emit 'offensive noise' (cl. 30 and 31). The maximum penalty is 100 penalty units for a corporation or 50 penalty units for an individual. Under cl.32 it an offence to use noise control equipment that is defective or not securely in place. Under this clause noise emissions must also not increase as a result of poor maintenance or inappropriate modification of noise control equipment on vessels. The maximum penalty is 100 penalty units for a corporation or 50 penalty units for an individual. Offensive noise' is defined in the Protection of the Environment Operations Act 1997 as being noise: '(a) that, by reason of its level, nature, character or quality, or the time at which it is made or any other circumstances: (i) is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is emitted, or (ii) interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
		(b) that is of a level, nature, character or quality prescribed by the regulations or that is made, at a time, or in any other circumstances
Explosives Act 2003 *Explosives Regulation 2013*	This Act provides that a licence is required for handling explosives and explosive precursors, including a blasting explosive user's licence.	The maximum penalty for handling an explosive or explosive precursor without authorisation is 500 penalty units for a
Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019 Administered by the EPA	The Regulation requires owners and operators to regularly check for leaks in the fuel tanks and pipes used to store and handle petroleum products. Owners and Operators also need to meet minimum standards in their day-to-day environmental management of these storage systems. The Regulation deals with the following issues: • the commissioning and decommissioning of underground storage systems (Part 2); • leak detection systems (Part 3); • the use of underground storage systems (Part 4); • record-keeping (Part 5); and • other ancillary issues.	It is an offence to contravene any provisions of the Regulation and responsibility of which lies with the person responsible for the system. The person responsible for the underground petroleum storage system (**UPSS**) is required to have in place: • a system for detecting and monitoring leaks; • groundwater monitoring wells at sensitive locations and a program to test them; • an Environment Protection Plan for the facility; and • systems in place for record keeping, reporting of leaks and notifying the local council when a UPSS is decommissioned.
Pollution and Hazardous Substance Management Legislation		
State Policies and Strategies		
National Environmental Protection (National Pollution Inventory) Measure (**NPI NEPM**). Administered by National Environment Protection Council (**NEPC**) and DE	The NPI NEPM was established to assist in reducing the existing and potential impacts of emissions of substances and to assist government, industry and the community in achieving desirable environmental outcomes by: • the collection of a broad base of information on emissions of substances on the reporting list to air, land and water; and • dissemination of information collected to all sectors of the community.	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	The NPI NEPM provides the framework for the development and establishment of the NPI which is an Internet database designed to provide publicly available information and amounts of certain chemicals being emitted to the air, land, and water.	
National Environment Protection (Ambient Air Quality) Measure (**Air Quality NEPM**). Administered by NEPC and DE	The Air Quality NEPM aims to set uniform standards for ambient air quality (ambient air does not include indoor air). The pollutants covered by the Air Quality NEPM include: • Carbon monoxide; • Nitrogen dioxide; • Photochemical oxidants (as ozone); • Sulfur dioxide; • Lead; and • Particles (PM10). In May 2003 the Air Quality NEPM was varied to add an advisory PM2.5 standard. In December 2015, the Air Quality NEPM was varied to amend various reporting standards including to PM2.5 and PM10. These came into effect on 4 February 2016. The Air NEPM is implemented in NSW through programs that are incorporated in the NSW Government's 25-year Air Quality Management Plan, Action for Air.	
	The POEO Act sets the mechanisms by which emissions from major sources are controlled and the *POEO Clean Air Regulation 2010* provides the framework for the management of air pollution and controlling of burning. It sets never to be exceeded concentration limits for air pollution. The particle PM10 Air Quality NEPM goal is effected, particularly in rural population centres where a combination of topography, climate The PM2.5 advisory reporting standard, is also effected by events such as bushfires and dust storms which have a significant influence on PM2.5 data.	
National Environment Protection (Movement of Controlled Waste between States and Territories) Measure (**Waste NEPM**).	The Waste NEPM aims to ensure that controlled wastes that are to be moved between States and Territories are properly identified, transported, and handled in accordance with environmentally sound practices. The Waste NEPM was varied slightly in 2004 to allow for exemptions to the NEPM for approved Extended Producer Responsibility and recycling schemes	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Administered by NEPC and DSWEPC	In 2010, the NEPC made a minor variation to the NEPM to provide greater clarity, remove unnecessary regulatory burden and remove clauses that are no longer required. Drafting errors were corrected through a variation in 2011. The Waste NEPM has been implemented in NSW since 1999 and is given effect through the *POEO (Waste) Regulation 2014* and conditions of relevant environment protection licences. The Regulation and licence conditions require all persons in NSW who store or generate controlled waste, and who intend to move the waste to an interstate destination, to obtain a consignment authorisation from the relevant agency in the jurisdiction of destination and to complete an approved Waste Transport Certificate.	
National Environment Protection (Assessment of Site Contamination) Measure (**Contamination NEPM**). Administered by NEPC and DE	The purpose of the Contamination NEPM is 'establish a nationally consistent approach to the assessment of site contamination to ensure sound environmental management practices by the community which includes regulators, site assessors, environmental auditors, landowners, developers and industry'. Adoption of the Contamination NEPM in NSW has been achieved within the CLM Act.The Contamination NEPM and its components have been approved by NSW as guidelines under s.105 of the CLM Act. The Guidelines must be taken into consideration when the EPA is making a decision on whether a site poses a significant risk of harm according to s.9 of the CLM Act and when an accredited contaminated site auditor is conducting a site audit. The Contamination NEPM was amended in 2013. The Amendment updated the methodologies to be used for assessing human and ecological risks and site assessment methods in line with advances in Australia and overseas.	
National Environment Protection (Diesel Vehicle Emissions) Measures (**Diesel Vehicle NEPM**). Administered by NEPC and DE (also, EPA)	The Diesel Vehicle NEPM was created in June 2001 and aims to reduce exhaust emissions from diesel vehicles, by facilitating compliance with in-service emissions standards for diesel vehicles. The Diesel Vehicle NEPM is implemented through programs that are incorporated in the NSW Government's 25-year Air Quality Management Plan, Action for Air. The Protection of the *Environment Operations Act 1997* (NSW) and the *Protection of the Environment Operations (Clean Air) Regulation 2002* (NSW) provide the regulatory basis for action to address emissions from the in-service diesel fleet.	Warnings, fines, inspection notices and defective vehicles notices can be issued to owners of excessively smoky vehicles, in serious cases the DEC may commence proceedings.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	That Regulation underpins the NSW Smoky Vehicle Program a key element of the NSW Diesel NEPM implementation. The Regulation prohibits excessive visible smoke emissions from vehicles and tampering with emission control equipment. The in-service diesel vehicle emission standards established in National Transport Commission regulations provide the benchmark against which the emissions performance of NSW diesel vehicles are assessed. In May 2009 the NEPC made a minor variation to the Diesel Vehicle NEPM to incorporate developments in diesel vehicle emissions technologies and experience gained in implementing the NEPM.	
Energy		
Commonwealth Legislation		
National Greenhouse and Energy Reporting Act 2007 Administered by the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education and relevant Greenhouse and Energy Data Officers	The Act came into effect on 29 September 2007. It establishes a National Greenhouse and Energy Reporting System (**NGERS**) for reporting greenhouse gas emissions, energy consumption and production by corporations from 1 July 2008. The Act precedes the Carbon Pollution Reduction Scheme (**CPRS**) and forms the basis of the monitoring, reporting and auditing required for the CPRS. Key features of the Act are: • compliance reporting of greenhouse gas emissions, energy consumption and production by large corporations; and • public disclosure of company level greenhouse gas emissions and energy information. The Act makes registration and reporting mandatory for corporations who meet specified thresholds. There are two types of thresholds to determine which corporations are affected by the Act: • Facility thresholds; and • Corporate group thresholds.	Under s.22G of the Act, failure on the part of a corporation to provide a report to a Greenhouse and Energy Data Officer may result in a penalty fine of 340,000. S.30, in turn, provides that for each day after the specified period that a corporation fails to provide a report in accordance with s.22G, it may be liable to pay an additional fine of $17,000 per day. Further Under Division 137 of the Criminal Code Act 1995, it may be an offence to provide false or misleading information or documents to the Greenhouse and Energy Data Officer in purported compliance with the Act.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	Both the facility and corporate group thresholds are made up of three components: • a greenhouse gas emissions threshold; • an energy production threshold; and • an energy consumption threshold. Corporations need to look at the Act to determine whether they meet the thresholds for any of these components. The facility thresholds are: •25 kilotonnes or more of greenhouse gases—carbon dioxide equivalence (CO2-e); •production of 100 terajoules (TJ) or more of energy; or •consumption of 100 TJ or more of energy. Corporate group thresholds are: •50 kt or more of greenhouse gases (CO2-e); •production of 200 TJ or more of energy; or •consumption of 200 TJ or more of energy. The Regulations provide further clarification on key concepts and definitions contained in the Act. The Regulations, and by extension, the Act, have been through a process of refinement since their introduction in this respect	
National Greenhouse and Energy Reporting Regulation 2008 Administered by the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education and relevant Greenhouse and Energy Data Officer	The Regulation provide further clarification on key concepts contained in, and further particulars in relation to the administration of, the National Greenhouse and Energy Reporting Act 2007. In particular, the Regulation provides definitions for some of the key concepts used in the Act.	
Carbon Credits (Carbon Farming Initiative) Act 2011 Department of Environment and Energy	This Act gives effect to the Emissions Reduction Fund (see below).	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Energy		
Commonwealth Policies and Strategies		
Emissions Reduction Fund	The ERF came into effect in December 2014 and incentivises eligible projects to reduce greenhouse gas emissions. Businesses earn carbon credits for reductions and earn money from selling these credits. A Carbon Market place has been introduced which connects carbon credit sellers and purchasers online.	
National Greenhouse Strategy	The Strategy provides the framework for advancing Australia's domestic greenhouse response and meeting international obligations. The strategy contains a range of actions for addressing the causes of the accelerated greenhouse effect.	
Biodiversity		
Commonwealth Policies and Strategies		
National Strategy for the Conservation of Australia's Biological Diversity	The Strategy recognises that the conservation of biological diversity provides significant cultural, economic, educational, environmental, scientific and social benefits for Australia. The Strategy makes provision for: • conservation for biological diversity across Australia; • integrating biological diversity conservation and natural resource management; and • managing threatening processes.	
Australian Government Biodiversity Policy	This policy (a consultation draft) aims to complemented the National Strategy (above).	
Biodiversity		
State Legislation		
Fisheries Management Act 1994 Administered by the Department of Primary Industries	The Act objective is to conserve, develop and share the fishery resources of the State for the benefit of present and future generation.. The Act protects threatened native fish and marine vegetation and requires that consideration be given to the effect of development or activity during the environmental planning and assessment process.	It is an offence under the Act to harm any threatened species, population or ecological community without appropriate development consent. It is also an offence to damage any critical habitat either by act or by omission, and it is an offence to damage the habitat of a
National Parks and Wildlife Act 1974 Administered by Department of Planning, Industry and Environment		It is an offence, amongst other things, to: • harm native fauna or pick native flora within wildlife protection areas unless licensed to do so;

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	The Act provides for the establishment, preservation and management of national parks and the preservation, protection and management of certain fauna, native flora and Aboriginal heritage both inside and outside protected areas. There are also sections in the Act which encourage voluntary assistance programs to promote conservation outside reserves, for example conservation agreements.	• harm or pick any threatened species, population or ecological community. 'Harm', in the context of harming an animal, is defined in the Act as including hunting, shooting, poisoning, netting, snaring, spearing, pursuing, capturing, injuring or killing. 'Pick' in the context of picking a plant is defined as gathering, plucking, cutting, pulling up, destroying, poisoning, taking, digging up, removing or injuring.
Biodiversity Conservation Act 2016 Administered by Department of Planning, Industry and Environment	The main objectives of the Act are: • conserve biodiveristy at bioregional and State scales; • maintain the diversity and quality of ecosystems and enhace their capacity to adapt to change and provide needs for future generations; prevent the extinction of native plants and animals; • to improve, share and use knowledge, including local and traditional Aboriginal ecological knowledge, about biodiversity conservation; • to support biodiversity conservation in the context of a changing climate; to support collating and sharing data, and monitoring and reporting on the status of biodiversity and the effectiveness of conservation actions • to assess the extinction risk of species and ecological communities, and identify key threatening processes, through an independent and rigorous scientific process; and to regulate human interactions with wildlife by applying a risk-based approach; • to support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature, and to support and guide prioritised and strategic investment in biodiversity conservatio.	It is an offence, amongst other things, to: • harm animals • pick up plants • damage declares areas, habitats of threatened species or ecological communities, dealing in animals or plants.

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	Further, the Act provides for the conservation and recovery of threatened species, populations and communities and makes provision for the management of threatened species under the Act. It integrates the conservation of threatened species into development control processes under the EP&A Act. The Act establishes the Biodiversity Stewarship Payments Fund which amalgamates any funds that were in the Biobanking Trust Fund under the *Threatened Species Conservation Act 1995* (now repealed).	
Biodiversity		
State Policies and Strategies		
Bushcare	The Bushcare program is a volunteer program which aims to reverse the long term decline in the quality and extent of Australia's native vegetation cover. Investment in the program aims to help to protect, enhance and increase vegetation in the Australian landscape.	
NSW Biodiversity Offsets Policy	This Policy commenced on 1 October 2014 for state significant development and state significant infrastructure. It improves biodiversity offsetting for major projects in NSW including mines.	
NSW Aquatic Biodiversity Strategy	Appears to have been abandoned - plan to incorporate into new Biodiversity strategy.	
The Biodiversity Conservation Investment Strategy 2018	This strategy sets the government's priorities for investing in private land conservation.	
Policy and guidelines for fish habitat conservation and management 2013	This document outlines the key policies and guidelines responsible for maintaining and enhancing fish habitat for the benefit of native fish species, including threatened species, in marine, estuarine and freshwater environments.	
Australian Standards		
AS 2096–1987 Classification and coding systems for Australian Coals	This standard describes the classification of Australian coals into two rank classes. It also sets out systems for coding coals within each class and provides quantitative definitions for traditional names.	N/A
AS/NZS ISO 14004:2004 Environmental management systems - General guidelines on principles, systems and support techniques	This International Standard provides guidance on the establishment, implementation, maintenance and improvement of an environmental management system and its coordination with other management systems.	N/A

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
AS/NZS ISO 14015:2003 Environmental management - Environmental assessment of sites and organizations (**EASO**)	This International Standard provides guidance on how to conduct an EASO through a systematic process of identifying environmental aspects and environmental issues and determining, if appropriate, their business consequences. This International Standard covers the roles and responsibilities of the parties to the assessment (the client, the assessor and the representative of the assessee), and the stages of the assessment process (planning, information gathering and validation, evaluation and reporting).	N/A
AS/NZS ISO 14031:2013 Environmental management - Environmental performance evaluation – Guidelines	This International Standard gives guidance on the design and use of environment performance evaluation within an organisation. It is applicable to all organisation's, regardless of type, size, location and complexity.	N/A
AS/NZS ISO 19011:2011 Guidelines for quality and/or environmental management systems auditing	This International Standard provides guidance on the principles of auditing, managing audit programmes, conducting quality management system audits and environmental management system audits, as well as guidance on the competence of quality and environmental management system auditors. It is applicable to all organizations needing to conduct internal or external audits of quality and/or environmental management systems or to manage an audit programme.	N/A
AS/NZS 1269 Set: 2005 Occupational Noise Management Set	This Standard provides an overview of the AS/NZS 1269 series and general requirements on occupational noise management. The series deals with noise as it affects hearing, but does not deal with other effects of noise. It also provides an integrated approach to establishing,	N/A
AS 1319-1994 Safety signs for the occupational environment	The Standard sets out requirements for the design and use of safety signs intended for use in the occupational environment to regulate and control safety related behaviour, to warn of hazards and to provide emergency information including fire protection information.	N/A
AS 1470-1986	This Standard sets out recommendations aimed at promoting the health, safety and wellbeing of persons in the workplace.	

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
Health and safety at work – Principles and practices	The purpose of this Standard is to outline the action which should be taken by employers and employees in all occupational groups in order to achieve healthy and safe working conditions. The requirements apply primarily to the prevention of personal damage but apply also to the minimization of property damage. The concepts are applicable to the whole range of conditions or events at work that can damage the individual with varying degrees of severity, either rapidly or over a period of time.	N/A
AS/NZS 4801:2001 Occupational health and safety management systems – Specification with guidance for use	This Standard specifies requirements for an occupational health and safety management system (**OHSMS**) to enable an organisation to formulate a policy and objectives taking into account legislative requirements and information about hazards or risks. It applies to those hazards or risks over which the organisation may exert control and over which it can be expected to have an influence. This Standard is applicable to any organisation that wishes to: (a) implement, maintain and improve an OHSMS; (b) assure itself of its conformance with its stated OHS policy; (c) demonstrate such conformance to others; (d) seek certification/registration of its OHSMS by an external organisation; or (e) make a self determination and declaration of conformance with the Standard.	N/A

Applicable Environmental Legislation and Standards

Act/Initiative/ Standard	Overview	Offences
	All the requirements in the Standard are intended to be incorporated into any OHSMS. The extent of the application will depend on such factors as the OHS policy of the organisation, the nature of its activities and the conditions in which it operates	
AS/NZS 4804:2001 Occupational health and safety management systems – General guidelines on principles, systems and supporting techniques	This Standard provides guidance on the development and implementation of occupational health and safety management systems (OHSMS) and principles, and their integration with other management systems. The guidelines are applicable to any organisation, regardless of size, type, or level of maturity, that is interested in developing, implementing or improving on an OHSMS.	N/A