SUBURBAN RAIL LOOP EAST

SRL East – Environmental Management Framework

September 2022

PLANNING AND ENVIRONMENT ACT 1987

BAYSIDE, KINGSTON, MONASH AND WHITEHORSE PLANNING SCHEMES

CONDITION 4.4 OF THE SUBURBAN RAIL LOOP EAST INCORPORATED DOCUMENT, AUGUST 2022

ENDORSED REPORT

SHEET 1 OF 127

SIGNED .....
MINISTER FOR ENVIRONMENT AND CLIMATE ACTION

DATE 17 / 10 / 2022

SUBURBAN RAIL LOOP AUTHORITY

VICTORIA'S BIG BUILD

VICTORIA State Government

Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

Contents

Abbreviations and Glossary

Abbreviation	Explanation
AS	Australian Standard
CEMP	Construction Environmental Management Plan
DBH	Diameter at Breast Height
DELWP	Department of Environment, Land, Water and Planning
EE Act	*Environment Effects Act 1978*
EES	Environment Effects Statement
EMF	Environmental Management Framework
EMS	Environmental Management System
ERS	Environmental Reference Standard
EPA	Environment Protection Authority Victoria
EP Act	*Environment Protection Act 2017*
EPA Publication 1820	EPA Publication 1820: Construction – guide to preventing harm to people and the environment
EPA Publication 1834	EPA Publication 1834: Civil construction, building and demolition guide
EPA Publication 1856	EPA Publication 1856: Reasonably practicable
EPR	Environmental Performance Requirement
GED	General Environmental Duty under section 25 of the *Environment Protection Act 2017*
HHRA	Human Health Risk Assessment
ICOMOS	International Council on Monuments and Sites
IEA	Independent Environmental Auditor
ISO	International Organization for Standardization
IWMP	Initial Works Management Plan
km	kilometre
NZS	New Zealand Standard
OEMP	Operations Environmental Management Plan
POSF	Public Open Space Framework
Project	Suburban Rail Loop East
SRLA	Suburban Rail Loop Authority
UDS	Urban Design Strategy
UDLP	Urban Design and Landscape Plan
VAHC	Victorian Aboriginal Heritage Council
WAG Pipeline	Westernport-Altona-Geelong Pipeline
WEMP	Worksite Environmental Management Plan

Term	Description
Contractor	For the purposes of this EMF, an overarching term to refer to contractors for design and construction and contractors/franchisees for Operation, where relevant.
Contractor EMS	Environmental Management System developed and implemented by contractors in accordance with ISO 14001:2015
DBH	Diameter at Breast Height: the height at which the tree trunk diameter is measured (usually 1.5 metres from the ground level for the purposes of calculating a tree protection zone)
Incorporated Document	Document incorporated into a planning scheme under section 6(2)(j) of the *Planning and Environment Act 1987*. The Incorporated Document discussed in this EMF is for the use and development of land to deliver the rail infrastructure for SRL East. It does not refer to the Incorporated Document protecting the underground infrastructure of SRL East.
Project Land	The Project Land includes the areas in which the project components will be contained, including both permanent structures and temporary construction areas (both above and below ground). The Project Land does not consider construction traffic routes required to be used for theProject.
Project Outline	The document (10th November 2020) that describes Suburban Rail Loop East which was submitted to the Minister for Planning to support the decision that the project was public works under the *Environment Effects Act 1978.* The Project is referred to as Suburban Rail Loop Stage One in the Project Outline.
Public Works	Public Works are works declared by Minister for Planning as requiring an EES under the EE Act. On 20 December 2020 the Minister for Planning declared the Suburban Rail Loop Stage One, as described in the Project Outline dated 10 November 2020, to be 'public works' for the purposes of section 3(1) of the EE Act. SRL Stage One is referred to as SRL East in the EESand in this EMF. The Public Works excludes the works listed in Schedule 1 of the Public Works Order, as amended on 5 August 2021.
Scoping Requirements	Environment Effects Statement Scoping Requirements, Suburban Rail Loop Stage One, were issued by the Minister for Planning June 2021 and set out the matters to be investigated and documented in the EES for the project. SRL Stage One is referred to as SRL East in the EES and this EMF.
SRL East	The first stage of Suburban Rail Loop from Cheltenham to Box Hill.
SRLA	Suburban Rail Loop Authority was established in 2019 an administrative office of the Department of Transport that is responsible for the planning and delivery of the Suburban Rail Loop (SRL), on behalf of the Victorian government, from Cheltenham to Melbourne Airport. Following the proclamation of the *Suburban Rail Loop Act 2021*, SRLA became a statutory authority and took over all functions from the Administrative Office.
SRLA EMS	Environmental Management System to be developed by the Suburban Rail Loop Authority
SRL East Approvals	The statutory approvals for Suburban Rail Loop including the Planning Scheme Amendment (PSA) with Incorporated Document, the key secondary consents and the Cultural Heritage Management Plan (CHMP) being sought by SRLA for SRL East.
Ultimate configuration	The infrastructure configuration enabling train services between Cheltenham and Melbourne Airport, to support the Ultimate Capacity, 30 trains per hour.

1. Introduction

This is the Environmental Management Framework (EMF) for Suburban Rail Loop East (SRL East)(the Project). The purpose of the EMF is to provide a transparent and integrated framework to manage environmental effects of the Project during construction and operation to achieve acceptable environmental outcomes.

The development of the EMF has been informed by relevant legislation, policy and guidelines, and the specialist impact assessment studies completed for the SRL East Environment Effects Statement (EES) and the Minister's Assessment, dated 5 August 2022.

This EMF forms a component of the overall governance framework for delivery of the Project. The EMF includes Environmental Performance Requirements (EPRs) that define environmental outcomes that must be achieved during the design, construction, and operation phases of theProject.

The EMF outlines the roles and responsibilities for environmental management and monitoring of the Project's environmental performance to provide a transparent framework for governance and implementation of this EMF.

Compliance with the EMF and EPRs will be monitored by an Independent Environmental Auditor (IEA) and enforced through the contractual requirements for delivery and operation of the Project. It will also be mandated by the terms of the SRL East Incorporated Document requiring the Project to be developed in accordance with the EMF and EPRs approved by the Minister for Planning.

1.1 EES Scoping Requirements

This EMF responds to the EES Scoping Requirements which requires the provision of an EMF to articulate the environmental standards and outcomes to be achieved and governance arrangements to manage and monitor environmental effects.

The EMF specifies the environmental management arrangements for project delivery for the following items.

Scoping Requirement item	Section of the EMF that outlines the management arrangement
• description of the environmental management system to be adopted	***Section 5.1***
• organisational responsibilities, accountabilities and resourcing arrangements	***Section 3***
• statutory and other requirements, including approvals, consents, applicable legislation, standards and guidelines	***Section 2*** and ***Section 3.3***
• environmental risk assessment and a register of environmental risks	***Section 4***
• environmental performance requirements and management measures proposed in the EES, including commitments to avoid, mitigate or manage adverse effects and enhance environmental outcomes	***Section 7***
• developing and approving environmental management plans for the construction and operational phases	***Section 5***
• evidence for measuring compliance, including a monitoring program (e.g. pre-construction, during construction and post-completion, baseline data, objectives, parameters, locations and frequency)	***Section 6***

Scoping Requirement item	Section of the EMF that outlines the management arrangement
• auditing and reporting of performance, including compliance with environmental performance requirements and the EMF and continuous improvement	***Section 6***
• responding to and managing environmental incidents or emergencies	***Section 5***, ***Table 5.1***
• a program for community consultation, stakeholder engagement and communications for the project, including opportunities for stakeholders to provide input into each phase of the project and a process for complaints recording and resolution.	***Section 5***, ***Table 5.1***

2. Statutory context and approvals

The statutory basis for the EMF is primarily set by the *Planning and Environment Act 1987* (Vic) (P&E Act) and *Environment Protection Act 2017* (Vic) (EP Act). SRLA is responsible for preparing the EES for the Project under the *Environment Effects Act 1978* (Vic), which has informed the assessment of the SRL East approvals.

SRLA is responsible for the following approvals and decisions:

- Approval of a Planning Scheme Amendment under the P&E Act which introduces the Project Incorporated Document and Specific Controls Overlay into the relevant planning schemes to facilitate the use and development of Project Land for the Project.
- Approved Cultural Heritage Management Plan(s) (CHMP) under the *Aboriginal Heritage Act 2006* (Vic)
- A decision under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) on whether the Project is a controlled action and, if so, an approval for the Project (if required). The project was determined to be not a controlled action under the EPBC Act on 11 January 2022.

Contractors are required to comply with laws, the conditions of these key approvals and to obtain and comply with all other approvals, licences, permits and consents that may be required.

2.1 Incorporated Document

The delivery of the Project is facilitated by an Incorporated Document in the Bayside, Kingston, Monash and Whitehorse Planning Schemes. Amendment GC197 introduced two separate incorporated documents into schedules to the Clause 45.12 Specific Controls Overlay (SCO). SCO14 is for the use and development of the land for delivery of the Project, and is referred to in this EMF as the SRL East Incorporated Document. SCO15 is to enable protection of the tunnels and underground infrastructure from future development and is not subject to this EMF.

Clause 4.4 of the SRL East Incorporated Document requires the preparation of an EMF for the Project to the satisfaction of the Minister for Planning prior to the commencement of development (excluding preparatory buildings and works under Clause 4.13.2 of the Incorporated Document). Clause 4.4.2 requires that the EMF must include Environmental Performance Requirements (EPRs) that are applicable to the design, construction, and operations of the Project.

Clause 4.4.3 of the SRL East Incorporated Document requires the EMF to set out the process and timing for development of:

a. Construction Environmental Management Plan

b. Worksite Environmental Management Plan(s)

c. Operation Environmental Management Plan

d. other plans and procedures required by the EPRs as relevant to any stage of the Project; and

e. include an overview of the process and timing for consultation with relevant councils, the Department of Transport, Heritage Victoria, Melbourne Water, the Department of Environment, Land, Water and Planning (DELWP), Environment Protection Authority (EPA) and any other stakeholders as relevant.

The SRL East Incorporated Document (Clause 4.3) includes reference to the SRL East Surface and Tunnel Plans approved by the Minister for Planning under clause 4.3.1. These plans cover the core elements of the Project being the station box locations and surface elements, substations, tunnel alignment (including indicative locations of cross passages), Stabling Facility and the Emergency Support Facility. The SRL East Incorporated Document authorises and regulates the construction and operation of these elements of the Project generally in accordance with the SRL East Surface and Tunnel Plans.

The detailed engineering and architectural design of the Project must be undertaken in accordance with the requirements of the Incorporated Document including the EPRs and the Urban Design Strategy (UDS). The design of permanent above ground elements will be documented in the Urban Design and Landscape Plans (UDLP) approved by the Minister for Planning.

The Minister for Planning is the Responsible Authority for the SRL East Incorporated Document for delivery of the Project.This EMF does not apply to the SRL East Infrastructure Protection Incorporated Document, for which the relevant councils are the Responsible Authority.

2.2 Environment Protection Act duties and obligations

The EP Act is founded on a prevention-based approach to protect human health and the environment from pollution and waste. The EP Act contains environmental duties which apply to all parties who undertake activities that could impact the environment or human health.

The General Environmental Duty (GED) is the cornerstone of the EP Act. The GED imposes a continuing obligation on anyone engaging in an activity that may give rise to a risk to human health and the environment from pollution or waste to take action to eliminate or reduce that risk as far as reasonably practicable. Doing what is reasonably practicable means putting proportionate controls in place to eliminate or reduce the risks of harm. A breach of the GED could lead to criminal or civil penalties.

The obligations under section 25(4) of the EP Act require certain steps to be taken to eliminate or reduce risks, such as ensuring the handling, storage and transport of substances (for example soil) are appropriately managed. The obligations also seek to ensure controls are continually evaluated and staff are adequately trained in compliance with the GED. Section 25(5) imposes requirements on a person who designs equipment or structures, making them explicitly subject to the GED.

A systems and risk-based approach was adopted for the EES to assess the impacts of the Project. This approach considered the potential risk and impacts to the environment and human health through detailed assessments of the Project which have informed the development of EPRs to address those impacts through design, construction and operation.

The EPRs require SRLA and its Contractors to develop an Environmental Management System (EMS) (described in Section 5.1) aligned with AS/NZ ISO 14001 to monitor and evaluate compliance, as supported by an IEA. The EMS requires the establishment of systems and processes to identify, assess andcontrol risks of harm to human health and the environment, and environmental duties are continually monitored for compliance. An EMS also requires that there are processes for identifying opportunities for continual improvement in environmental management, and legislative and policy compliance across the Project. The EMF requires that both SRLA and its Contractors comply with all their environmental duties under the EP Act. Compliance with this EMF and the EPRs will form a key component of SRLA and Contractor compliance with the GED. The GED is a concurrent separate obligation in relation to the proposed mitigation measures outlined in the EMF. Additional mitigation measures may be required to minimise the risk of harm to human health or the environment so far as reasonably practicable under the GED. These additional measures may evolve over time as the ‘state of knowledge’ evolves.

The EP Act includes a number of other important duties relevant to the Project, whichare outlined in Table 3.2.

2.3 Works Covered by this EMF

This EMF applies to the delivery of the infrastructure for SRL East within the Project Land and specifically relates to the rail and station infrastructure requirements subject to the controls set out in the SRL East Incorporated Document (See 2.1). The general alignment and location of the Project is presented in Figure 2.1and includes, but is not limited to, the following elements:

- Railways, including approximately 26 km of twin-bore rail tunnels and cross passages between Cheltenham and the Stabling Facility in Heatherton, and from the Stabling Facility to Box Hill.
- Railway stations, including six new railway stations at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill, with interchanges to existing stations at Cheltenham, Clayton, Glen Waverley and Box Hill.
- Underground station fit out and public realm works for the railway station entrances.
- Transport interchanges to support the railway stations which includes transport terminals, bus terminals and tramways, as well as provision of pedestrian and cycling infrastructure.
- Rail tunnel portals at either side of the Stabling Facility comprising dive structures and a tunnel portal at the interface with the rail tunnels.
- A railway Stabling Facility to provide stabling and maintenance for all trains on SRL East including an operational control centre and associated facilities such as a train wash and electrical substation.
- An Emergency Support Facility between SRL station at Glen Waverley and SRL station at Burwood.

- Electrical substations in the vicinity of the new SRL station at Burwood and the Stabling Facility.
- Ancillary activities including utility and infrastructure relocations, demolishing buildings, site preparation, earthworks and other activities to support construction.

In addition to the construction and delivery phases, this EMF also covers the environmental impacts of the operation of the Project. Operational activities will include:

- Stations, trains and signal operations.
- Tunnel operation including water management, ventilation and maintaining the Emergency Support Facility.
- Power Supply Sub Station operation to provide electricity to run the trains.
- Stabling Facility operations to provide routine maintenance and cleaning of the trains.

Figure 2.1 SRL East Overview

2.3.1 Works Not Covered by this EMF

This EMF does not cover the:

- Future land use and development of the precincts that would occur around the new SRL East stations. This will be addressed through a future precinct planning and consultation process undertaken by SRLA.
- SRL East Infrastructure Protection Incorporated Document.
- Initial Works and relocation of the Westernport–Altona–Geelong pipeline, which are described further below.

2.3.1.1 Initial works

SRLA provided the Minister for Planning an Initial Works Impact Assessment and Project Outline in December 2020, which subsequently informed the Minister's decision to exclude the Initial Works from the EES. The Initial Works are listed in Schedule 1 of the Minister for Planning's Public Works Order which was amended on 5 August 2021. Clause 1.5 of the SRL East Incorporated Document states that the Control in the document does not apply to works described as excluded works (known as Initial Works) in the Public Works Order, that are being delivered under the requirements of the Initial Works Management Plan as endorsed by the Minister for Planning on 19 December 2021 under clause 52.30-6.

Initial Works include investigative works, protection works, utility relocation and installations, ground improvement works and minor road modifications for locations.

On 19 December 2021, the Initial Works (excluding new power connections) were approved under Clause 52.30 of the Victoria Planning Provisions.

The cumulative effects of Initial Works and the balance of the Project were assessed in the EES. However, the Initial Works will be managed under the Initial Works Management Plan endorsed by the Minister for Planning rather than the EMF or the EPRs in Section 7.

2.3.1.2 Westernport–Altona–Geelong (WAG) pipeline

Relocation of the Westernport–Altona–Geelong (WAG) pipeline operated by Viva Energy Australia is anotherpackage of works that will not be managed under this EMF. The pipeline crosses the Stabling Facility site along the existing Old Dandenong Road reserve and will require partial relocation. The section of pipeline to be relocated will be shifted to the east of its current alignment along the boundary of the Stabling Facility site, tying back into the existing pipeline within the Old Dandenong Road reserve to the north (near the Henry Street Linear Reserve) and to the south (near Kingston Road).

Whilst the pipeline was considered in the impact assessments undertaken for the EES, the WAG pipeline relocation would be assessed and authorised through a pipeline licence amendment under the *Pipelines Act 2005 (*Pipelines Act*)*, which requires a Construction Environmental Management Plan (CEMP) to be developed to manage the potential environmental impacts of the works. The Pipelines Act regulates the construction and operation of pipelines in Victoria. DELWP and Energy Safe Victoria (ESV) are responsible for administering the Pipelines Act and the Pipelines Regulation 2017. Under the Pipelines Act, a licence must authorise the route of a pipeline. Any alteration to the authorised route must be in accordance with Division 6 of Part 5 of the Pipelines Act.

3. Roles and Responsibilities

The roles, responsibilities, accountabilities and governance framework for implementing the EMFduring Project delivery are outlined in the following sections.

3.1 Project Delivery

SRL East will be delivered over several years. It is expected that multiple competitive tender processes will be undertaken to identify contractors that will work collaboratively with SRLA and key stakeholders to deliver SRL East.

SRLA will enter into a contract (Project contract) with each contractor engaged to deliver a works package for SRL East. This Project contract will impose obligations on each contractor to comply with the EMF and EPRs as approved by the Minister for Planning. SRLA will manage the Project contracts on behalf of the Victorian Government. Requirements relating to 'contractors' within this EMF typically apply to the head contractor for each package.

Applicable legislation and the EMF requires that both SRLA and Contractors comply with their environmental duties. SRLA will engage an Independent Environmental Auditor (IEA) to assess compliance with the EMF and EPRs. The IEA will assess compliance through review and verification of environmental documentation and undertaking audits of project activities to assess compliance with environmental obligations. The IEA will be required to prepare audit reports and provide these to SRLA and the contractors.

The EMF outlines the requirements for SRLA and contractors regarding continual improvement and the IEA will verify processes are in place to identify opportunities for continual improvement in environmental performance and compliance.

3.2 Roles and Responsibilities

Table 3.1 describes the roles and responsibilities under the EMF. Contractor responsibilities will be included as conditions within the Project contracts.

Table 3.1 Roles and Responsibilities for Environmental Management under this EMF

Agency or Organisation	Role	Responsibilities
Minister for Planning	Regulation	Approve the Project's EMF, EPRs, Urban Design Strategy, Public Open Space Framework and Heatherton (Stabling Facility) Public Open Space Management Plan as required by the SRL East Incorporated Document. Approve the Contractors' Urban Design and Landscape Plans as required by the SRL East Incorporated Document. Approve amendments to the SRL East Surface and Tunnel Plans, as required. Receive six-monthly summary audit reports. Administer and enforce conditions within the SRL East incorporated document.
DELWP / EPA	Regulation	Advise the Minister for Planning on the above responsibilities and on compliance with the SRL East Incorporated Document. Review, comment, engage in development and, where necessary, approve relevant plans and documents as required by the EMF, EPRs and SRL East Incorporated Document. Receive six-monthly summary audit reports.

Agency or Organisation	Role	Responsibilities
SRLA	Project Proponent	Obtain the key SRL East approvals including: • Planning Scheme Amendment • Cultural Heritage Management Plan(s) • Public Open Space Framework • Urban Design Strategy • Heatherton (Stabling Facility) Public Open Space Management Plan Revise and update the EMF and EPRs in response to the relevant matters and recommendations made by the Minister's Assessment. Mandate compliance with the EMF, EPRs, Urban Design Strategy and Public Open Space Management Framework in Project contracts and enforce contract requirements. Develop and implement SRLA EMS in alignment with AS/NZS ISO 14001. Implement its responsibilities under the EMF and comply with the EPRs for which it is responsible under Table 7.1. Engage an IEA. Review and accept environmental management documentation in accordance with Table 5.1 including the Environmental Strategy, CEMP, OEMP, and other documentation as required by the Incorporated Document, the EMF and EPRs. Monitor contractor compliance with the EMF, EPRs, approvals and approval conditions, including issues raised in audits and require corrective action to be taken where necessary. Establish the Urban Design Advisory Panel and Public Open Space Advisory Panel for the Project. Review and accept Urban Design and Landscape Plans to confirm that they are generally in accordance with the approved Urban Design Strategy and relevant EPRs. Develop a Communication and Stakeholder Engagement Management Framework. Conduct stakeholder engagement and community consultation activities and liaise with regulators and other agencies as required. Develop and implement a complaints management system that includes processes for recording, managing and resolving complaints. Provide six-monthly summary audit reports to the Minister for Planning covering the outcomes of IEA reports and, following acceptance by the Minister, make these reports publicly available. Promote continual improvement and innovation in environmental performance and sustainability.

Agency or Organisation	Role	Responsibilities
Contractors	Design, construct and operate SRL East	Comply with legislative and approval requirements, including the approved EMF, EPRs, Urban Design Strategy and Public Open Space Framework through design,construction, commissioning, and operation, as relevant to the Contractor's work package. Develop and implement an Environmental Strategy, CEMP and where relevant an OEMP in accordance with Table 5.1 Develop and implement a project specific EMS, certified to AS/NZSISO 14001. Develop environmental documentation and management plans in accordance with legislative and approval requirements, including this EMF and EPRs. Develop and implement Community and Stakeholder Engagement Plans in accordance with SRLA's Community and Stakeholder Engagement Management Framework. Provide adequate resources to comply with all environmental requirements and the community and stakeholder engagement requirements of the Project Contract. Obtain additional approvals and consents as required to facilitate the delivery of the relevant work package. Where relevant to the works, this includes preparation of the Urban Design and Landscape Plan and seeking Minister for Planning approval. Undertake regular internal audits to assess and ensure compliance with environmental documentation, including approved CEMPs, OEMPs, UDS, Public Open Space Framework and other documentation required by the EPRs. Assess and report on compliance with environmental obligations to SRLA and take corrective action where necessary. In the event of an environmental incident, report to the EPA in accordance with the EP Act. Preparation of summary monitoring reports and implementation of real time monitoring, as required Incorporate feedback from the IEA, SRLA and other stakeholders and identify opportunities for continuous improvement and innovation in environmental performance and sustainability Ensure sub-contractors' compliance with the EMF, EPRs, Environmental Strategy, CEMP, WEMPs, UDLPs and other plans required by the EPRs. Review sub-contractors' performance against these plans and take or require corrective action as necessary.
Urban Design Advisory Panel (UDAP)	Review and provide written advice to Minister for Planning	Review the UDS and UDLPs. Provide written advice to the Minister addressing the extent to which the Urban Design Strategy is consistent with all relevant matters set out in the Minister's Assessment. Provide written advice to the Minister addressing the extent to which the UDLPs are consistent with all relevant matters set out in the Minister's Assessment made pursuant to the EE Act and the approved EMF, EPRs and UDS.
Public Open Space Advisory Panel (POSAP)	Review and provide written advice to Minister for Planning	Review the Public Open Space Framework and Public Open Space Management Plans. Provide written advice to the Minister addressing the extent to which the Public Open Space Framework is consistent with all relevant matters set out in the Minister's Assessment made pursuant to the EE

Agency or Organisation	Role	Responsibilities
		Act. Provide written advice to the Minister addressing the extent to which the Heatherton (Stabling Facility) Public Open Space Management Plan is consistent with all relevant matters set out in the Minister's Assessment made pursuant to the EE Act and the approved Public Open Space Framework.
Independent Environmental Auditor (IEA)	Independent review, verify and accept relevant documents and auditing of compliance against environmental obligations	Prior to commencement of work and for each stage of the Project, review and verify each contractor's Environmental Strategy, CEMP, UDLP and other plans required to meet the EPRs for adequacy to manage risk to the environment and human health, and compliance with the conditions of the SRL approvals including the EMF, EPRs, UDS and Public Open Space Framework. Prepare an audit plan, including schedule and audit scopes, to the satisfaction of SRLA for each Project contract. Conduct audits of contractors' construction works and operations, at agreed intervals, to assess compliance with the EMF, relevant EPRs, CEMPs, OEMPs, and assessments, plans or documents required under these EPRs and conditions of project approvals. Conduct audits of SRLA's compliance to relevant EPRs and SRLA's EMS. Prepare quarterly audit reports containing the results of each audit and provide to SRLA and the contractor, as per Section 6. Provide feedback to SRLA and the contractor on continuous improvement and innovation in environmental performance and sustainability. Assist with the preparation of a six-monthly report to summarise audit outcomes and compliance of the contractor and SRLA with the EMF and EPRs and provide to SRLA.

3.3 Statutory Environmental Duties

The GED is the overarching duty that will apply to SRLA and its contractors. Duties relating to pollution incidents (s. 31 and s.32), duties relating to contaminated land (s.39 and s.40) and waste (s.133 through 143) complement the GED and inform the development of a suite of tools to discharge these duties.

To meet the requirements of this EMF, SRLA and its contractors must implement an EMS and protocols to identify, assess and control risks of harm to human health and the environment from pollution and waste through implementing practicable risk management measures. Table 3.2 has been developed to outline how the legislative requirements apply to the phases of the Project for the purposes of this EMF.

Table 3.2 Environment Protection Act 2017 duties, obligations, project phases and primary responsibilities

Legal Requirement	Action	Phase & Primary Responsibility			
		Planning (Including reference design)	Detailed design	Construction	Operation
General environmental duty (s25) *	Adoption of a risk-based approach and application of hierarchy of controls (eliminate and reduce).	SRLA	Contractor	Contractor	Contractor

Legal Requirement	Action	Phase & Primary Responsibility			
		Planning (Including reference design)	Detailed design	Construction	Operation
Duty to respond to harm (s31)	Take reasonably practicable measures to restore the environment if a pollution incident occurs as a result of a leak, spill or other unintended deposit or escape of a substance.	SRLA	-	Contractor	Contractor
Duty to notify of an event (s32-33)	Contact EPA as soon as practicable if a pollution incident happens that causes or threatens material harm to human health or the environment.	-	-	Contractor	Contractor
Duty to manage contamination (s39)	Manage or control contaminated land (vacant or occupied), including groundwater.	SRLA	Contractor	Contractor	Contractor
Duty to notify of certain contamination (s40)	Contact EPA as soon as practicable if the land is contaminated in any of the circumstances set out in the regulations. This includes contamination to groundwater.	SRLA*	-	Contractor	Contractor
Duties relating to industrial waste (s133-137)	Disposal of industrial waste at a 'lawful place'.	SRLA	-	Contractor	Contractor
Duties and controls relating to priority waste (s138-141)	Take all reasonable steps to ensure priority waste is contained and is isolated to ensure resource recovery remains practicable. Develop appropriate measures to manage priority waste.	SRLA	Contractor	Contractor	Contractor
Duties and controls relating to reportable priority waste (s142-143)	Record and notify transaction details relating to reportable priority waste in accordance with the proposed regulations via the EPA Interaction Portal.	-	-	Contractor	Contractor

*If required prior to contractor occupying a site

4. Risk Assessment

Environmental risks associated with the Project were identified to inform the scope of the EES impact assessments and to focus the study effort for each environmental discipline which then informed the development of the EPRs. A preliminary environmental risk register was developed to assist in identifying possible management measures and this risk register will form a key input for the development of delivery phase risk assessments.

Contractor risk assessments will inform the development of their construction and operation environmental management plans to comply with this EMF. The development of management and mitigationmeasures to address the risks identified and meet the EPRs will ensure that the risks of harm to human health andthe environment are minimised.

The contractor's risk assessment process must be consistent with AS ISO 31000:2018 Risk management – guidelines. Managing environmental risks is an ongoing process that will form a key component of both SRLA's EMS, and the contractor's EMS.

The contractor's environmental risk register will be maintained and reviewed on a regular basis to ensure it remains relevant and adequately considers risks throughout Project implementation. Key environmental risks will also be actively tracked though SRLA's organisational risk register.

5. Environmental Management Documentation

The EMF requires SRLA and contractors to develop Project specific documentation to comply with this EMF and the EPRs and address relevant legislation, approval conditions and contractual requirements. The EMF also requires contractors to develop and implement an EMS to control and monitor environmental impacts during design, construction and operation.

The SRL East Incorporated Document requires the preparation of an Urban Design Strategy and Urban Design and Landscape Plans to be approved by the Minister for Planning. These documents will inform the design of permanent above ground components of buildings (excluding tunnel portals and preparatory buildings and works). As these documents are a condition of the SRL East Incorporated Document, they have been included in this EMF.

5.1 Environmental Management System

The EMF and EPRs require that SRL East will be constructed and operated in accordance with an EMS that is consistent with AS/NZS ISO 14001:2016 *Environmentalmanagement systems — Requirements with guidance for use*.

An EMS provides an organisation with a framework and systematic approach to achieving their organisation-level objectives for environmental management, for meeting environmental obligations and driving continuous improvement.

The EMS will provide a framework for works to be planned and performed so that the risk of harm to the environment or human health are either avoided or minimised and are carried out in accordance with the approved EMF and EPRs. The EMS will also provide a framework for addressing the requirements of the statutory environmental duties under the EP Act.

SRLA's EMS will be developed and implemented in alignment with AS/NZS ISO 14001:2016. It will contain organisation-level policies, procedures, activities and registers to provide a systematic method formanaging and tracking compliance of the environmental aspects of the Project with the project approvals and legislation that are within SRLA's control or influence.

Contractors constructing and operating SRLA will be required to have an EMS certified to AS/NZS ISO 14001:2016. The EMS must be appropriate for the contractor's activities for the Project and be reviewed andverified as compliant with this EMF by the IEA.

The Contractor's EMS will provide a structured approach for complying with approvals and legislation as well as implementing, complying with and monitoring the implementation of CEMPs for project delivery and the OEMP for the tunnels, stations and stabling facility. The EMS, CEMPs and OEMP will be audited throughout the applicable project phases as a mechanism for continuous improvement.

Contractors will be required to identify environmental approvals, licences, permits, consents and applicable legislation relevant to their package and their approach and evidence of compliance with these contained within their EMS.

The EMS key components must include:

- Leadership and commitment
- Environmental policy
- Responsibilities and authorities for environmental management
- Environmental risk and opportunity assessment and actions to address these
- Requirements for setting and achieving objectives and achieving compliance with environmental legislation, the EMF and EPRs
- Requirements for competency and awareness
- Communication and reporting
- Management of documentation and records

- Operational control including emergency preparedness and response
- Monitoring procedures and internal and external audit program
- Processes for responding to incidents and non-conformance and implementing corrective and preventative action
- Review and continuous improvement.

5.2 Environmental Management Documents

Documents will be prepared by SRLA and Contractors to govern the management of contractor activities to meet environmental obligations including environmental legislation, approvals and approval conditions, including the requirements of this EMF and EPRs. These documents will also describe how contractors will identify, manage, and mitigate environmental risks and impacts during construction and operation. Clause 4.4.6 of the Incorporated Document requires the use and development of the Project to be carried out in accordance with this EMF including the EPRs and all plans and procedures required by them.

5.2.1 Developing and approving environmental documents

Documents and plans prepared by contractors are to include a sufficient level of detail to demonstrate compliance with the EPRs and the EMF, and how compliance will be achieved. Where detail is contained in subordinate documents such as work method statements, these subordinate documents will also be submitted by the contractor for review by the IEA and SRLA. Contractors will be required to address any inadequacies or areas of non-compliance of documentation with the SRL East approvals, EMF or EPRs.

The management plans required by conditions of the SRL East Incorporated Document and outlined in this EMF, and all plans and documents required by EPRs, will be controlled documents that will be subject to review or verification and approval or acceptance as outlined in Table 5.1.

Where EPRs require a plan to be developed in consultation with a relevant stakeholder or landowner, this will be done prior to the document being finalised and submitted to the IEA, and in accordance with 7.2.1.

Once the contractors' environmental management documents have been verified by the IEA as adequate and compliant with the EMF, EPRs, approved Urban Design Strategy, approved Urban Design and Landscape Plans (UDLP) and Project contract, these documents will be accepted by SRLA as meeting the requirements of the relevant Project contract.

The responsibility for the development, review and approval or acceptance of environmental documents required by the EPRs is identified in Table 7.1, with reference to Table 5.1.

An overview of the key environmental documentation and their relationships is provided in Figure 5.1.

5.2.2 Timing for the preparation of environmental documents

Documents and plans required by the EPRs may be prepared, verified and accepted in stages, and as separate documents and plans relating to individual locations at which works or activities are proposed, where the IEA is satisfied that the performance objectives of the relevant EPR continues to be met.

Documents and plans required by the EPRs will be accepted or approved at the time specified in the relevant EPR or, if no time is specified, before any activity identified in SRLA's EMS or the contractors' Environmental Strategy as giving rise to the risk or potential effect addressed by the document or plan.

Consistent with Table 5.1, contractors' Environmental Strategies will identify the timing for the implementation of EPRs (including the timing of the preparation of documents and plans, and any proposal to produce staged and/or location-specific plans), and the IEA will verify that the contractor's proposed timing is aligned with the requirements of the SRL Approvals and the EMF.

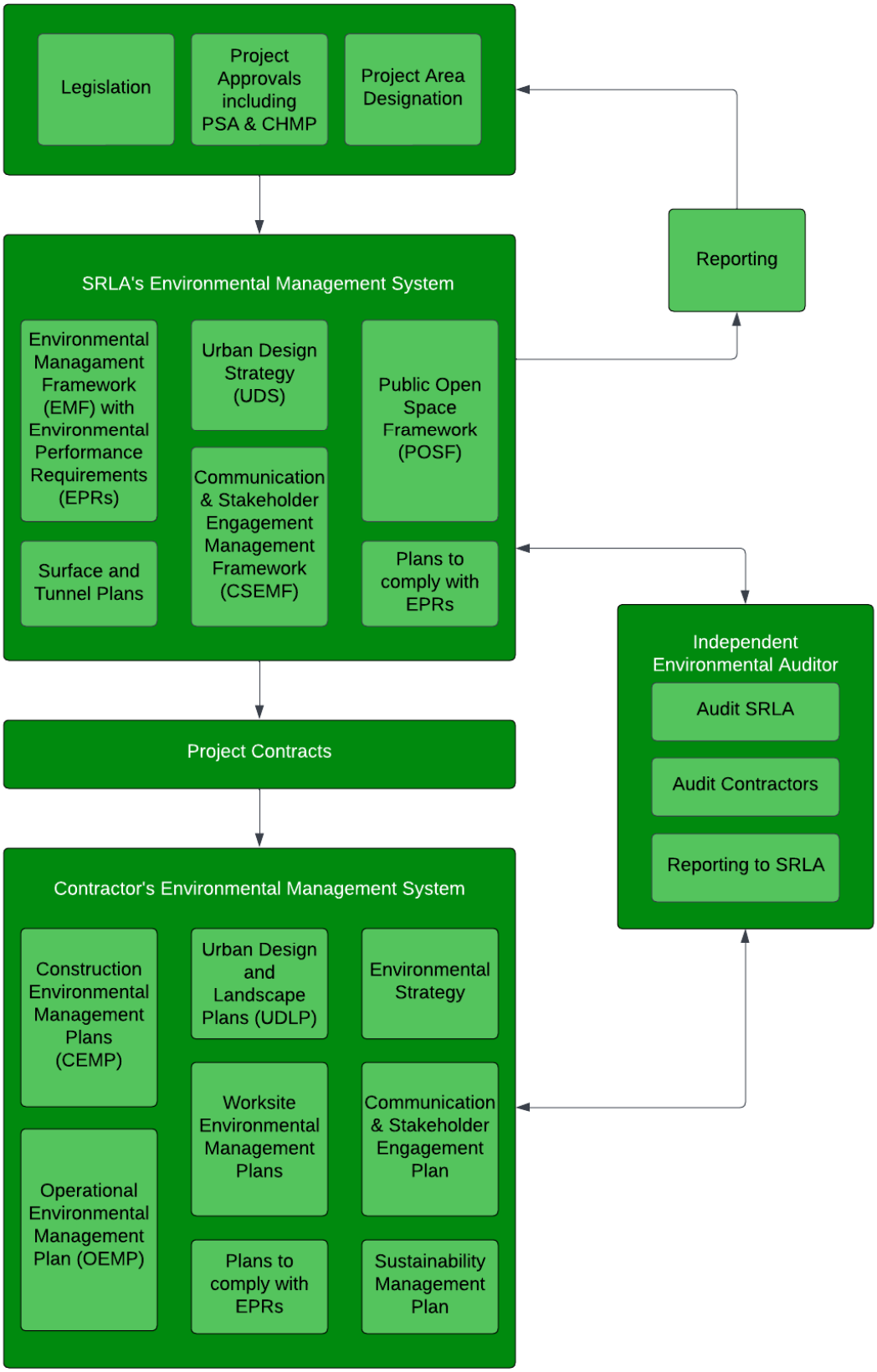

Figure 5.1 Key Environmental Management Documentation

5.2.3 Document change management

The EMF, EPRs or key contractor environmental management documents may require revision due to changes in design and work practices, monitoring results, legislation, risks, or to ensure continual improvement driven by audit results, incidents, complaints and other compliance obligations.

Revisions to the EMF, EPRs, UDS, UDLP or Public Open Space Framework will be submitted to the Minister for Planning for approval and supported by information as outlined in the SRL East Incorporated Document.

Contractors will be required to submit all major revisions of environmental documentation to the IEA for verification and to SRLA for review and acceptance. Revision could include:

- Minor revision – Change to clarify or improve environmental management practices, to add new obligations and associated controls, or minor change of work practices on site. No increase in or introduction of new environmental risks
- Major revision – Significant change to environmental management practices on site, work methods or scope that result in increased or new environmental risks or practices or monitoring.

The review, verification and approval for revised documents will be consistent with Table 5.1. Where a major revision is proposed to a document, SRLA or the IEA may require further consultation to be carried out prior to verification or acceptance.

Table 5.1 Responsibilities for Environmental Documents

Documentation	Description	Owner	To Review and/or Verify	To Approve or Accept
Environmental Management Framework Environmental Performance Requirements	The EMF and EPRs provide the governance framework and required environmental outcomes for design, construction and operation of SRL East. SRLA has updated the EMF and EPRs in response to the relevant matters and recommendations contained in the Minister's Assessment and submitted to the Minister for Planning for approval.	SRLA	**Review**: DELWP	Minister for Planning (approve)
Urban Design Strategy	The SRL East Urban Design Strategy provides urban design guidance relating to the design and delivery of SRL East. The Urban Design Strategy was updated in response to the relevant matters and recommendations contained in the Minister's Assessment and been submitted to the Minister for Planning for approval.	SRLA	**Review**: DELWP and UDAP	Minister for Planning (approve)
Public Open Space Framework	The SRL East Public Open Space Framework guides the process of managing the effects of the rail and infrastructure components of the Project on public open space. The Public Open Space Framework was updated in response to the relevant matters and recommendations contained in the Minister's Assessment and been submitted to the Minister for Planning for approval.	SRLA	**Review**: DELWP and POSAP	Minister for Planning (approve)
Environmental Strategy	Contractors will prepare and implement an Environmental Strategy for their package of work that complies with and addresses the requirements of this EMF. The Environmental Strategy will outline their approach to comply with all environmental requirements including relevant environmental laws, project approvals, approval conditions, the EPRs and the environmental requirements of the Project contract. The Environmental Strategy will include: • A summary of relevant legislative requirements and requirements of relevant statutory authorities, including any requirements for approvals, permits, consents and licences and conditions of these. This will describe how each of these requirements will be complied with and include the approach to identifying and managing changes to legal and other requirements. • A summary of how each EPR will be complied with, including the proposed actions, timing, proposed management plans or documents to address the EPR,consultation to be carried out, and the evidence that will be available to demonstrate compliance and where this will be documented. • A summary of how the environmental requirements of the Project contract will	Contractors	**Review**: SRLA **Review and verify**: IEA	SRLA (accept)

Documentation	Description	Owner	To Review and/or Verify	To Approve or Accept
	be complied with. • Roles, responsibilities, competencies and authorities for adequately resourcing environmental management during delivery of SRL East and the approach to managing subcontractors and suppliers. • Requirements for communications, reporting and responding to environmental complaints, including details of procedures for interacting with EPA and any other authorities. • An overview of how the environmental management documents required for the package of work, including the CEMP, OEMP and other plans required by the EPRs will be approached and structured, considering the nature of activities for the package of works and any staging of delivery or different work precincts. This overview must include for each plan a description of its purpose, required content, approval and change management processes, and how it relates to the Environmental Strategy and other plans • Processes for monitoring, auditing and evaluating compliance with legislative andapproval requirements, the Environmental Strategy, EPRs and the environmental requirements of the Project contract, and processes for review and continuous improvement. • The approach to incident and emergency response including reporting, corrective and preventative action. • A process for managing, reviewing and approving major and minor revisions of the Environmental Strategy, including as a consequence of changes to environmental laws and standards.			
Urban Design and Landscape Plans (UDLPs)	Urban Design and Landscape Plans will demonstrate compliance with the Urban Design Strategy and EPRs and be required by the SRL East Incorporated Document for permanent above-ground buildings or structures (excluding preparatory buildings and works under Clause 4.13.2 of the Incorporated Document). As required by Clause 4.7.5 of the SRL East Incorporated Document, UDLPs will be made available for public inspection and comment prior to submission to the Minister for Planning for approval. UDLPs may be prepared in stages as detailed design of the above-ground infrastructure is progressed throughout delivery of the Works.	Contractors	**Review:** SRLA, DELWP, UDAP **Review and verify:** IEA	Minister for Planning (approve)

Documentation	Description	Owner	To Review and/or Verify	To Approve or Accept
Public Open Space Management Plans	Public Open Space Management Plans will be prepared in accordance with and demonstrate compliance with the Public Open Space Framework. Consultation on the Public Open Space Management Plans is to occur in accordance with the Public Open Space Framework. As required by Clause 4.9.1, Heatherton (Stabling Facility) Public Open Space Management Plan must be submitted to the Ministers for Planning for approval.	SRLA	**Review**: DELWP Suburban Parks team (Heatherton (Stabling Facility) Public Open Space Management Plan only, and POSAP **Review and verify:** IEA	Minister for Planning (Heatherton (Stabling Facility) Public Open Space Management Plan only (approve)
Construction Environmental Management Plan (CEMP)	Contractors will develop and implement a CEMP(s) for their package of works, as required by the Project contract and in accordance with the Environmental Strategy and applicable EPRs. Relevant works will not start until the IEA has reviewed the adequacy of and verified compliance with the EMF, EPRs and Environmental Strategy, and SRLA has reviewed and accepted, the CEMP and all required sub-plans. The CEMP will be prepared in accordance with the requirements of the EMF, EPRs, Environmental Strategy, and Project contract, and with reference to EPA Victoria Publication No. 1834: Civil construction, building and demolition guide. The CEMP will include details of processes and responsibilities for: • Achieving compliance with approval conditions, relevant legislation, the construction EPRs and environmental components of the Project contract. • Identifying, managing and monitoring environmental risks and issues during construction and implementing contingency measures. • Set out the decision-making framework for justification to the IEA that unavoidable works meet the definition as outlined in EPA Victoria Publication 1834, managed impact works provide a net community benefit as set out in EPR NV2 and outline a list of works and circumstances which will meet the definition of emergency works. • The use and maintenance of plant, equipment, processes, and systems to minimise risk of harm from pollution and waste. • Ensuring all substances are handled, stored, used, or transported in accordance with EPA guidelines and to minimise risk of harm from pollution and waste. • Site inductions, training, competency and awareness to all personnel engaging inactivities associated with construction.	Contractors	**Review:** SRLA **Review and verify:** IEA	SRLA (accept)

Documentation	Description	Owner	To Review and/or Verify	To Approve or Accept
	• Communication and reporting. • Environmental monitoring, reporting and auditing requirements and evaluating compliance with legislative and approval requirements, EPRs and the environmental components of the Project contract. • Managing complaints, incidents, non-conformances and taking corrective and preventative action, including reporting corrective and preventative action. • Emergency preparedness and response including after-hours response, arrangements for containing environmental damage and attendance on-site in theevent of an emergency. • Review and continuous improvement. Contractors may choose to develop one CEMP for their works or individual CEMPs for precincts or components of their works, or in stages to reflect the differing requirements of their works. Similarly, contractors may choose to address all of the environmental impacts within one CEMP document or to create a series of sub-plans to the CEMP for each environmental value. Monitoring plans should be appendices to the relevant management plan. CEMPs will be developed to address the contractor's design and construction methodology. The CEMP(s) will be prepared in consultation with stakeholders relevantto the works covered in the plan. CEMP sub-plans required by any relevant EPR should be prepared in consultation with the relevant landowner or manager, EPA Victoria, responsible authorities and emergency services, where required in relation to issues within their jurisdiction and as required by relevant EPR. *Note – not all plans required by the EPRs will be sub-plans to the CEMP. The structure of plans and sub-plans will be determined by the contractor to allow for an integrated and logical approach to addressing and managing impacts across the various plans, consistent with the Environmental Strategy.*			
Communication and Stakeholder Engagement Management Framework (CSEMF)	SRLA will develop the Communication and Stakeholder Engagement Management Framework (CSEMF) for SRL East that sets out the principles and framework for the community and stakeholder engagement to be undertaken for all contractors for the Project. The content of the CSEMF is outlined in EPR SC1.	SRLA	**Review and verify**: IEA	

Documentation	Description	Owner	To Review and/or Verify	To Approve or Accept
complaint management system	SRLA will develop a complaint management system for recording, managing, and resolving complaints received from affected stakeholders. The Procedure must be consistent with the CSEMF and the Australian Standard AS/NZS 10002: 2014 Guidelines for Complaints Management in Organisations.	SRLA	**Review and verify**: IEA	
Communications and Stakeholder Engagement Plan	Contractors will develop individual communications and stakeholder engagement plans for each of the Project components that comply with the CSEMF to address construction activities.	Contractors	**Review**: SRLA **Review and verify**: IEA	SRLA (accept)
Sustainability Management Plan	Contractors will develop a Sustainability Management Plan that outlines how they will achieve the SRL East sustainability objectives and targets for their relevant activities and works and comply with the relevant Sustainability and Greenhouse Gas EPRs.	Contractors	**Review**: SRLA **Review and verify**: IEA	SRLA (accept)

Documentation	Description	Owner	To Review and/or Verify	To Approve or Accept
OEMP	The Contractor undertaking commissioning and operation will develop and implement an OEMP as required by the contract. The OEMP will be prepared in accordance with the requirements of the EMF, EPRs, Environmental Strategy and contract and address potential environmental impacts of commissioning, operation and maintenance activities. The OEMP will identify the nature of operational activities and environmental features of the project area and contain detailed procedures and responsibilities for: • Achieving compliance with the operational EPRs • Achieving compliance with approval conditions and relevant legislation • Identifying, managing and monitoring environmental risks and issues during operation and implementing contingency measures • The use and maintenance of plant, equipment, processes, and systems to minimise risk of harm from pollution and waste • Ensuring all substances are handled, stored, used, or transported in accordance with EPA guidelines and to minimise risk of harm from pollution and waste • Site inductions, training, competency and awareness to all personnel engaging in activities associated with operation. • Communication and reporting • Environmental monitoring, reporting and auditing requirements • Managing complaints, incidents, non-conformances and taking corrective and preventative action • Emergency preparedness and response including arrangements for containing environmental damage and attendance on-site in the event of an emergency • Review and continuous improvement. The OEMP will be prepared in consultation with agencies relevant to the works covered in the plan including EPA Victoria, and as required by any relevant EPR.	Contractors	**Review**: SRLA **Review and verify**: IEA	SRLA (accept)

Documentation	Description	Owner	To Review and/or Verify	To Approve or Accept
Other plans required by the EPRs to be prepared by SRLA	The EPRs (Section 7) set out requirements for SRLA to undertake assessment or develop and implement relevant management plans or documents to avoid, minimise and mitigate impacts, where those impacts or measures for their avoidance, minimisation and mitigation relate to matters within the particular control of SRLA and not contractors. All assessments and plans required under these EPRs are to be prepared by suitably qualified and experienced personnel and verified as adequate to address the potential impacts and compliance with the EPRs by the IEA. For clarity all assessments, plans or documents required under these EPRs will be subject to review and verification by the IEA, even when not expressly mentioned in individual EPRs. These plans should be reviewed annually or at a frequency as determined by the IEA to confirm the plans are adequately addressing impacts of works as they progress to different stages and are progressively completed. Where appropriate, the management plans required by these EPRs may be included as part of the CEMP or OEMP rather than as stand-alone plans.	SRLA	**Review and verify:** IEA	
Other plans required by the EPRs to be prepared by contractors	The EPRs (Section 7) set out requirements for contractors to undertake assessments or develop and implement relevant management plans to avoid, minimise and mitigate impacts. All assessments, plans or documents required under these EPRs are to be prepared by suitably qualified and experienced personnel and verified as adequate to address the potential impacts and compliance with the EPRs by the IEA. For clarity all assessments, plans or documents required under these EPRs will be subject to review and verification by the IEA, even when not expressly mentioned in individual EPRs. These plans should be reviewed annually or at a frequency as determined by the IEA to confirm the plans are adequately addressing impacts of work as they progress to different stages and are progressively completed. In the course of SRLA's review of these plans, it may direct the contractor on what management actions or mitigation measures are required to be undertaken, especially in respect of higher-order risks or impacts which may require mitigation work at the location of receivers. Where appropriate, the management plans required by these EPRs may be included as part of the CEMP or OEMP rather than as stand-alone plans.	Contractors	**Review**: SRLA **Review and verify**: IEA	SRLA (accept)

Documentation	Description	Owner	To Review and/or Verify	To Approve or Accept
Worksite Environment Management Plans (WEMPs)	Individual plans identifying site-specific environmental control measures to be implemented. WEMPs will be developed once the detailed design and construction methodology is prepared by the contractor. The WEMPs will address the requirements of the EPRs, CEMP and other plans required by the EPRs and project contract and be developed with reference to EPA Victoria Publication No. 1834: *Civil construction, building and demolition guide*. The WEMPs will be developed to consider: • Each construction site's environmental features • The nature of the works to be undertaken • Potential environmental impacts and activity specific environmental risks • Relevant EPRs • Relevant conditions of key approvals and any secondary approvals required • The findings of any environmental investigations undertaken by the contractors • Review and continuous improvement.	Contractors	**Review**: SRLA **Review and verify**: IEA	SRLA (accept)

6. Evaluating Compliance

This section identifies the requirements for monitoring, auditing and reporting of compliance with this EMF and EPRs. SRLA, contractors and the IEA each have responsibilities for evaluating environmental compliance.

6.1 Monitoring

A range of monitoring plans will be specified in each contractor's CEMP, management plans and OEMP required to comply with the Incorporated Document, EPRs and contractor's environmental duties under theEP Act. The methodology, parameters to be monitored and the frequency of monitoring will reflect regulatory requirements and the level of potential risk to human health and the environment. Monitoring will include periodic inspections of construction works and assets constructed. Compliance withthe EMF and EPRs will be monitored by the contractors, the IEA, and SRLA.

6.1.1 SRLA and the Independent Environmental Auditor

SRLA and the IEA will monitor contractor compliance through the review of environmental documentation (as outlined in ***Section 5***), audit results (as outlined in ***Section 6.2***) and reports (as outlined in ***Section 6.3***). SRLA's EMS will contain processes for monitoring implementation of EPRs that SRLA is responsible for, as well as monitoring compliance with the CEMP and OEMP.

Where required, SRLA will also undertake pre-construction, baseline and post-construction monitoring to comply with EPRs if not undertaken by contractors.

SRLA will develop a trial approach for uploading air and noise monitoring data on a publicly accessible website and will make data available, where practicable.[1]

SRLA will determine the commencement date for a 12-month real time monitoring trial at each location taking into consideration the information provided in the CNVMP and EAPDMP and privacy and data sharing requirements. At the end of the 12-month trial period, the IEA will verify whether the published real time noise and air quality data on a publicly available project website has utility for the affected community/ies.

In the event that the IEA verifies that real time monitoring has utility for the affected community, an annual review of the scope and location of the real time monitoring will be undertaken by the IEA until it is determined that it is no longer useful or relevant.

6.1.2 Contractors

Contractors will be required to specify detailed monitoring requirements in the CEMP, the OEMP and any other plans where relevant as required by the EPRs or SRLA. This will include documenting parameters to be monitored, frequency of monitoring, proposed equipment and equipment requirements, required competency of staff and recording and reporting processes. Monitoring programs will reflect relevant legislation and guidelines for the proposed type of monitoring, regulatory requirements and the level of potential risk to the environment. Monitoring plans must be part of or appended to relevant management plans. Monitoring will include periodic inspections of construction works areas and assets constructed.

Contractors will be required to implement monitoring programs in accordance with their environmental documentation and regularly review monitoring program implementation to verify that the monitoring frequency is sufficient, range of parameters being monitored is adequate and changes to programmed construction activities are adequately covered by the monitoring program.

Any proposed modifications to monitoring programs will be submitted to the IEA for review, verification and acceptance and SRLA for review of major revisions before the modifications were implemented. Contractors will be responsible for the ongoing management of baseline and monitoring data and will be

[1] Instantaneous or 'live' data will not always be possible. For example, airborne noise is measured as a 15 minute average, so the data for that 15 minute period needs to be uploaded to the publicly available website.

required to provide this to the IEA and SRLA upon request.

Contractors will support the 12-month real time monitoring trial by ensuring that the data are available in a timely manner. The timing of the commencement of the 12-month trial and the selection of monitoring locations for inclusion on a publicly accessible platform will be dependent on the following information to be included in the EAPDMP and the CNVMP:

- If there is risk of harm of the proposed works,
- extent and duration of proposed works to ensure the continuity of the 12-month trial,
- suitability of the site to technically locate the equipment and transmit data, and
- that the selected locations are representative of air and noise emissions from constructing the proposed works.

It will include noise reference levels and an explanation of the data limitations including:

- that the data have not been verified nor analysed to exclude background contributions, and
- the data do not necessarily solely represent noise or air emissions from the construction of the Project.

The data would also be utilised by the contractor as part of their monitoring program.

Where noise and air quality monitoring equipment is located on private property, contractors will consult with the owners and occupiers of the property to seek their consent for the monitoring data to be made available on the publicly available real time monitoring platform. Monitoring data collected on private property will not be included on a publicly accessible platform without the written consent of the owners and occupiers of the land.

The contractor will make verified monthly air quality monitoring results publicly available one month after the relevant month.

6.2 Auditing

Audits will be conducted at regular intervals to evaluate compliance with the EMF and EPRs. The proposed auditing regime is described below and summarised in Table 6.1.

6.2.1 Independent Environmental Auditor

SRLA will engage an IEA for the purpose of auditing SRLA and all contractors forcompliance with the EMF, EPRs and the project approvals. This appointment will allow the audits of contractors to be undertaken in a consistent manner across the various work packages for SRL East, and recommendations and corrective actions can be applied across all work packages where necessary. Consistently with EPR EMF3, the IEA must include a body of professionals with qualifications and relevant expertise and experience for all the disciplines covered by the EMF, EPRs and project approvals to allow the roles specified for the IEA in this EMF to be adequately carried out. It may include, but will not be limited to, accredited auditors appointed pursuant to s208 of the EP Act.

The IEA will develop an audit plan, including a schedule developed in accordance with Table 6.1, and audit scopes to the satisfaction of SRLA for each Project contract.

When assessing compliance, a key requirement of the IEA will be to consider the technical adequacy and effectiveness of actions proposed in management plans and then implemented to manage risks to the environment and human health, and to comply with the EMF and EPRs. Audits will include review of documentation as well as site inspections.

Audits will be conducted using a risk-based approach where compliance with all EPRs audited at least once every 12 months and higher risk activities may be audited more frequently.

Audit reports will be prepared for each audit and provided to SRLA and the contractor. The IEA and SRLA will prepare a summary of all the audit reports every six months, with sufficient detail to inform the public of any non-compliance with EPRs, trends in performance and remedies being implemented. The

summary report will be provided to the Minister for Planningand, within one month of being provided to Minister for Planning, to the community via the project website.

Contractors will be required to take corrective and preventative actions to address identified non-conformances and, where required, other audit findings. Where applicable, key findings from each audit will also be communicated between work packages so that learnings may be applied to drive positive and continuous improvements in environmental performance and sustainability.

Key plans developed by the contractors, including the Urban Design and Landscape Plans, EnvironmentalStrategy, CEMP, OEMP, Sustainability Management Plan, WEMPs and other plans as required by EPRs, and will be required to be reviewed and verified by the IEA as adequately managing the risk to the environment and human health, and compliance with the conditions of the SRL approvals including the EMF, EPRs, UDS and Public Open Space Framework. Any revisions to these plans will also be required to be reviewed, verified and accepted by the IEA, as outlined in Table 5.1.

6.2.2 Contractors

Contractors will carry out regular internal audits (at least quarterly) to assess conformance with their EMS, AS/NZS ISO 14001 and the effectiveness of the EMS.

Contractors will also be required to outline an internal audit schedule within the CEMP to assess their environmental performance and effectiveness of environmental management measures and monitoring programs. This will include regular audits to evaluate:

- Compliance with the EMF, Environmental Strategy, CEMP, WEMPs, OEMP, UDLPs and any other plans required by the EPRs
- Compliance with the EPRs
- Legislative compliance, including with approval conditions and the GED
- Responses to non-compliances, incidents and complaints received with feedback incorporated into review and continuous improvement processes
- Effectiveness and implementation of management measures and monitoring programs.

6.2.3 Audit process and audit reports

Audits will be conducted in accordance with AS/NZS ISO 19011 *Guidelines for auditing management systems*. Auditors should be suitably qualified and independent of the activity being audited.

Compliance will be assessed through site-based observation of project activities, interviews and reviewof documents and records. Records to be reviewed will include, but are not limited to:

- Environmental monitoring, process monitoring and management performance monitoring results
- Work method statements, site plans and operating procedures
- Incidents and a representative selection of complaints that may indicate potential non-compliances
- Inspection and audit reports
- Soil and waste management records (in accordance with EPA Guidance)
- Surveys
- Meeting minutes
- Monthly reports
- Other documents relevant to assessing compliance and the technical adequacy and effectiveness of actions taken to comply with the EPRs.

The results of each audit, including audit evidence relied on, will be documented in an audit report. The audit report template will be agreed with SRLA. Table 6.1 provides the audit requirements and frequency for SRL East.

Table 6.1 Audit Requirements and frequency

Audit	Scope	Frequency	Responsibility		
			SRLA	Contractor	IEA
EMF and EPR Compliance Audits	Contractors (and SRLA's) compliance with the EMF, EPRs, Environmental Strategy, CEMP, OEMP, UDLPs any other plans required by the EPRs, conditions of project approvals, and as required by SRLA. Compliance with every EPR to be audited annually, and higher-risk activities must be audited more frequently. Audits will occur during construction and for the first two years of operation of SRL East, or until the Minister for Planning is satisfied that the audits by the IEA are no longer required.	Quarterly	Engage IEA Participate in audits	Participate in audits	External Audit of contractors and SRLA
Routine Environmental Performance Audits	Compliance of contractors will be assessed through a monthly rotation of visits to each active project site to observe project activities, undertake interviews and review documents and records. Records to be reviewed will include: • Environmental monitoring, process monitoring and management performance monitoring results • Work method statements, site plans and operating procedures • Incidents and a representative set of complaints* • Inspection and audit reports • Soil and waste management records • Surveys • Meeting minutes • Monthly reports Other documents relevant to assessing compliance and the technical adequacy and effectiveness of actions taken to comply with the EMF, EPRs, Environmental Strategy, UDLPs, CEMP or OEMP.	Monthly, starting 6 months from commencement of works	Engage IEA Participate in audits	Participate in audits	External Audit of contractor

Audit	Scope	Frequency	Responsibility		
			SRLA	Contractor	IEA
Contractor Environmental Performance Internal Audit	Assess environmental performance and effectiveness of environmental management measures and monitoring programs. This will include regular audits to evaluate: • Compliance with the EMF, Environmental Strategy, CEMP, WEMPs, OEMP, UDLPs and any other plans required by the EPRs • Compliance with the EPRs • Legislative compliance, including with approval conditions • Responses to non-compliances, incidents and comments received • Effectiveness and implementation of management measures and monitoring programs • Review and continuous improvement.	Quarterly	-	Internal Audit	-

* The IEA considers complaints received as an indicator of potential non-conformances. The IEA is not involved in addressing complaints.

6.3 Reporting

Contractors' compliance with the EMF, EPRs, Environmental Strategy, CEMP, OEMP, UDLPs, any other plans required by the EPRs and conditions of project approvals will be reported as summarised below.

6.3.1 Independent Environmental Auditor

The IEA will prepare audit reports for each individual audit and provide these to SRLA, the contractors and to applicable regulators where required. The audit reports will describe the audit activities undertaken, audit findings, the status of actions taken to address any previousaudit findings, and the contractors' compliance with the EMF and EPRs.

6.3.2 Contractors

6.3.2.1 Reporting to SRLA

Performance against each contractor's CEMP and OEMP and other plans required to comply with the Incorporated Document, EPRs and relevant environmental legislation will be reported to SRLA and relevant government agencies as appropriate.

SRLA will consider and respond to the Contractor's reporting as appropriate, which may include suggestions for updates to work practices, plans or management responses. The CEMP and OEMP will describe the reporting and external notification requirements, including what needs to be reported and to

whom, and the timeframe for reporting.

The scope of monthly environmental performance reports and notification requirements will be agreed with SRLA. The reports will include as a minimum:

- Status of current and planned works
- Proposed changes to environmental documentation or management measures
- Compliance with environmental duties under or given effect via EP Act 2017
- EPR compliance register
- Copies of applications for consents, licences and approvals and the responses from authorities
- Copies of environmental studies, monitoring results / data and analysis in electronic format
- Internal and external audit findings and subsequent corrective and preventative actions taken
- Summary of consultation with and notifications to government agencies, regulatory authorities or other stakeholders, such as;
  - Notifications to EPA as required by the EP Act 2017 and EPA Guidelines (including copies of the notices provided to EPA)
  - Notifications to First Peoples State Relations or Registered Aboriginal Party (RAP) as relevant, and the Victorian Department of Environment, Land, Water and Planning (DELWP) if a potential Aboriginal cultural heritage site or artefact is identified
  - Notifications to Heritage Victoria and DELWP if a historical heritage artefact is discovered
  - Notifications to SRLA, the IEA, EPA Victoria and other relevant authorities in the event of other environmental incidents or complaints

SRLA may also require additional reporting through construction and operation of the Project.

6.3.2.2 Public Reporting

The Contractor will prepare summary reports of verified monthly air quality monitoring results, to be published within one month after the end of the relevant month. Real time monitoring of noise and air quality data will also be publicly reported in accordance with section 6.1.

7. Environmental Performance Requirements

7.1 Approach

The EPRs set out the environmental outcomes that must be achieved during design, construction and operation of the Project. The EPRs are intended to minimise impacts and the risk of harm to human health and environment to within reasonable limits having regard to contextual factors and the practical delivery ofthe Project.

The EPRs are a suite of performance-based environmental standards and outcomes that have been developed to address the environmental risks and impacts identified in the EES, while allowing for sufficientflexibility to encourage innovation by the private sector to determine how EPRs will be best be achieved. This performance-based approach of the EPRs enables different design alternatives or construction methodologies to be considered to achieve the required outcomes. This provides a delivery model that is flexible and encourages innovation through the procurement process by allowing tenderers to determine how EPRs will be achieved while developing and optimising the Project design. It also allows contractors to demonstrate how risks to human health and the environment will be eliminated or reduced as far as reasonably practicable.

The EPRs have been informed by relevant environmental legislation and policy requirements, and project specific measures recommended by specialists to minimise risk and avoid, minimise or offset environmental impacts identified through the EES impact assessment process. The EPRs include a requirement to develop a Sustainability Management Plan, which will include requirements to minimise energy use during construction and operation. Relevant legislation, standards, and guidelines to benchmark compliance have been referenced in the EPRs.

Where an EPR requires a pollution, waste or contaminated land issue to be "managed", the issue must be managed to eliminate the risk of harm to human health or the environment or, if that is not practicable, to reduce the risk of harm so far as reasonably practicable. Section 6(2) of the EP Act states that in determining what is reasonably practicable, regard must be had to the following matters:

- the likelihood of those risks eventuating
- the degree of harm that would result if those risks eventuated
- what the person concerned knows, or ought reasonably to know, about the harm or risks of harm and any ways of eliminating or reducing those risks
- the availability and suitability of ways to eliminate or reduce those risks, and
- the cost of eliminating or reducing those risks.

7.2 Consultation

Through ongoing engagement with local councils, relevant stakeholders and relevant government agencies, the issues and policy priorities of state and local government were incorporated into the EES and then are reflected in the EPRs contained in this EMF.

Prior to the commencement of works, a process for recording, managing, and resolving complaints received from affected stakeholders will be developed and implemented in accordance with EPR EMF4. The complaints management arrangements must be consistent with Australian Standard AS/NZS 10002: 2014 *Guidelines for Complaints Management in Organisations*.

7.2.1 Consultation Required by EPRs

Many EPRs require consultation with relevant stakeholders. Consultation will be undertaken by SRLA and contractors to identify issues and inform the development of final designs and plans.

Relevant stakeholders are generally defined as stakeholders with a role as the responsible authority for therequirement specified, the manager or owner of an asset or land directly affected by the works or requirement, an emergency services agency, or other relevant stakeholders identified by SRLA.

The purpose of consultation is to enable stakeholder views, requirements and relevant information held by the stakeholder to be considered when implementing the EPR. Consultation may include meetings, workshops and exchange of documentation and correspondence between SRLA or its contractors but will not necessarily require the submission of written documentation or draft plans for formal comment toany particular stakeholder. Consultation outcomes will be documented to demonstrate compliance with the EPRs. Consultation outcomes will also be shared with the relevant stakeholder and feedback provided on how matters raised during consultation have been considered and, where appropriate and reasonable, addressed by SRLA and its contractors.

In most cases, consultation and stakeholder engagement will be undertaken by contractors in accordance with Communications and Stakeholder Engagement Plans which comply with the overarching Communication and Stakeholder Engagement Management Framework (see Table 5.1 and EPRs SC1 and SC2). In addition to its oversight of Communications and Stakeholder Engagement Plans (per Table 5.1), and in accordance with its responsibilities under this EMF (per Table 3.1), SRLA will retain the power to lead consultation and stakeholder engagement as it considers necessary, especially on higher-order risks or impacts which may require at-receiver mitigation works. SRLA will lead consultation and engagement with the traditional owners and their representative organisations, although contractors will implement the construction management requirements of CHMPs and take part in direct engagement with traditional owners in relation to this.

7.3 EPRs

The Project contracts between the Victorian Government and contractors will require contractors to comply with the EMF, EPRs, all project approvals, and relevant legislation. The Project contracts will specify for each EPR whether the Victorian Government or contractor is responsible for implementation. The EMF and EPRs apply to those works covered by the SRL East Incorporated Document which excludesInitial Works (as described in Section 2.3.1).

Each contractor's Environmental Strategy will document the contractor's approach to compliance with each EPR, which will be verified by the IEA. Each contractor will therefore have their own plans for compliance with EMF and EPRs.

The EPRs are presented in Table 7.1 below and cover the following topics:

- Environmental management framework
- Aboriginal cultural heritage
- Air quality
- Arboriculture
- Business and Retail
- Contaminated land
- Ecology
- Electromagnetic interference
- Ground movement
- Groundwater
- Historical heritage
- Land use planning
- Landscape and visual
- Noise (airborne and ground borne) and vibration
- Social and community
- Surface water
- Sustainability and climate change (including greenhouse gas)
- Traffic and transport.

Notes for the EPR Table 7.1:

- 'All' means the EPR applies to the whole project and will be addressed considering the whole project rather than just for each of the components individually
- For timing of when EPRs apply, there are four project phases – Design, Construction, post-construction (for ground movement) and Operation. Construction planning will be covered in the design phase.
- The 'Implementation' column identifies who will be primarily responsible for implementing each EPR, noting in some instances SRLA may be responsible for preparing plans or documents and the Contractor responsible for the implementation of the relevant plans or documents. Where Table 7.1 identifies responsibility in respect of a document or plan, it is to be read with reference to Table 5.1, which also identifies responsibilities for review, verification, approval and or acceptance of documents or plans, and the overarching Roles and Responsibilities described in Table 3.1.

7.3.1 Management and mitigation measures

In the course of complying with the EPRs, SRLA and contractors (as relevant) will determine how to avoid, minimise or mitigate impacts as required by an EPR and, as relevant to the EP Act, how to eliminate or reduce risks so far as reasonably practicable, by applying the state of knowledge, considering current practice and any new innovative construction technologies and methods.

The Project will involve the design and construction of works, and the operation of multiple management systems, across a range of locations and a number of years. Table 3.1 identifies that contractors engaged to design, construct and operate SRL East are responsible for complying with EPRs, and implementing management and mitigation measures, as relevant to their particular works package. Management and mitigation measures will be determined and designed prior to the works giving rise to the relevant risk or potential effect., The management and mitigation measures will also be determined with regard to the SRLA's Environmental Management System and contractors' Environmental Strategies and implemented in the course of carrying out the relevant works.

Consistently with Table 5.1, contractors' Environmental Strategies will identify the timing for the determination, design and implementation of management and mitigation measures, and the IEA will verify that the contractor's proposed timing is aligned with the requirements of the SRL Approvals and the EMF.

Through the impact assessments prepared for the EES the technical specialists considered possible mitigation and management measures. They considered what is standard good practice construction techniques for rail tunnels and underground stations drawing on lessons and experience from recent projects in Melbourne and Australia. The mitigation and management measures as well as design and construction approaches considered in the EES impact assessment will be provided to contractors as a point of reference for when they are developing designs and plans to comply with the EPRs.

The development of environmental management documents required by EPRs will be in accordance with Section 5.1.

Table 7.1 Environmental Performance Requirements

Number	Environmental Performance Requirement	Project component	Timing	Implementation
Environmental Management Framework				
EMF1	**Deliver the Project in general accordance with an Environmental Management System** 1. Develop, implement and maintain an Environmental Management System (EMS) for use through the design, construction and operation of the Project that conforms with AS/NZS ISO 14001:2016 *Environmental Management Systems – requirements with guidance for use*.	All	Design Construction Operation	SRLA (SRLA EMS) Contractors (Project specific EMS)
EMF2	**Develop and deliver the Project in accordance with Management Plans** 1. Prepare and implement an Environmental Strategy, Construction Environmental Management Plan (CEMP), Worksite Environmental Management Plans (WEMPs), Operation Environmental Management Plan (OEMP) and other plans as required by the Environmental Performance Requirements (EPRs) and in accordance with the Environmental Management Framework (EMF). 2. Develop the CEMP, WEMPs and OEMP in consultation with relevant stakeholders as required by relevant EPRs. 3. Ensure performance against each CEMP, WEMP and OEMP and other plans complies with the EPRs and relevant environmental legislation must be reported to SRLA and relevant government agencies as appropriate. Reporting and notification requirements may include, but not be limited to, monthly environmental performance reports. 4. Address the requirements for the CEMP and OEMP as outlined in the EMF and include the management of chemicals, fuels and hazardous substances. The plans must include but not be limited to: a) Requirements to minimise storage of chemicals and fuels on site and to store hazardous substances in accordance with relevant guidelines and EPA requirements b) Measures to be implemented for the management, storage (including bunding) and disposal of hazardous substances c) Description of the approach to comply with the Victorian WorkCover Authority and the Australian Standard AS1940 Storage Handling of Flammable and Combustible Liquids with reference to EPA Victoria Publications: Civil construction, building and demolition guide (EPA Publication 1834), Liquid Storage and Handling Guidelines (EPA Publication 1698), and Construction – guide	All	Design Construction Operation	Contractors SRLA (for EPR Plans under the control of SRLA)

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	to preventing harm to people and the environment (EPA Publication 1820.1) (as amended or replaced from time to time). d) Contingency and emergency response procedures to handle fuel and chemical spills, including availability of on-site hydrocarbon spill kits.			
EMF3	**Audit and report on environmental compliance** 1. Appoint an Independent Environmental Auditor (IEA) to: a) Review the Environmental Strategy, CEMP, WEMPs, OEMP and other plans required by the EPRs for compliance with the EMF and the EPRs. b) Undertake environmental audits of compliance with and implementation of the EPRs and the Environmental Strategy, CEMP, WEMPs, OEMP and other plans required by the EPRs. c) Audit the Project's compliance with environmental duties under the EP Act, including frequency of evaluation, monitoring of compliance, reporting of compliance and non-compliances and further actions taken. d) Verify there are processes in place to identify opportunities for continual improvement in environmental management, performance, legislative and policy compliance. 2. Ensure the IEA comprises of a body of professionals with expertise, based on qualifications and experience, appropriate to allow the roles specified for the IEA in the EMF to be properly carried out. This would include professionals: a) appointed pursuant to section 208 of the EP Act as an environmental auditor for contaminated land with experience in contaminated land, groundwater and landfill gas b) with expertise in addressing noise and vibration so the IEA can audit and approve matters relating to noise and vibration impacts and have the relevant competencies[2] to assess 'unavoidable work'. c) with expertise in air quality. d) with expertise in stakeholder and communications engagement. e) with expertise in arboriculture.	All	Design Construction Operation	SRLA

[2] Skills and expertise in risk/safety assessment such as a Health Safety and Environment (HSE) specialist, who has no prior involvement in either planning or delivery of the Project and who can make decisions free from influence or pressure related to the delivery of the Project.

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	f) with expertise in human health risk assessment. 3. Ensure audits occur during construction and for two years after commencement of operation of the Project, or until the Minister for Planning is satisfied the audits by the IEA are no longer required. 4. Make public the 6 monthly summary reports of the audits within one month of being provided to the Minister for Planning.			
EMF4	**Develop and implement a complaints management system** 1. Develop and implement a system for recording, managing, and resolving complaints received from affected stakeholders. The complaints management arrangements must: a) be consistent with Australian Standard AS/NZS 10002: 2014 Guidelines for Complaints Management in Organisations. b) include response performance measures including but not limited to, set time frames in which to respond to complaints, instant acknowledgement and assessment of complaints and provision of summary of outcome to complainant as required. 2. Ensure the complaints management system is consistent with the communications and stakeholder engagement framework required under SC1.	All	Design Construction Operation	SRLA Contractors
Aboriginal Cultural Heritage				
ACH1	**Comply with the Cultural Heritage Management Plan** 1. Implement and comply with Cultural Heritage Management Plans (CHMPs) approved under the *Aboriginal Heritage Act 2006*.	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
Air Quality				
AQ1	**Develop and implement an Environmental Air Quality and Dust Management Plan (EAQDMP)** 1. Develop and implement an Environmental Air Quality and Dust Management Plan (EAQDMP) for each site in consultation with the EPA. 2. The plans must: a) Identify the main sources of dust, odour, construction vehicle emissions and airborne pollutants, and the location of sensitive receptors. b) Set out how the Project will control the emission of dust, odour, vehicle emissions and other pollution into the atmosphere during construction (including during any breaks in construction) so far as reasonably practicable in accordance with EPA Victoria Publication 1856 and with reference to EPA Victoria Publication 1834. c) Include a Risk Management and Monitoring Program (RMMP) that outlines monitoring methods that will be employed for the duration of the works, and actions that arise from the results of analysing that information to enable responsive and timely intervention and mitigation in accordance with EPA Victoria Publication 1961. The RMMP should: i. Detail the visual observation and instrumental monitoring methods to be adopted including monitoring specified in AQ2, routine visual checks of site activities, CCTV monitoring of major dust sources, and observations of odour and dust soiling beyond the construction site boundary. ii. Define trigger levels or conditions for each monitoring method that inform the need for additional control actions. The averaging period associated with the trigger levels for data records from the instrumental monitoring in AQ2 should be no longer than one hour, or shorter if found to be necessary to manage potential impacts in real time. iii. Outline how monitoring and recording of wind speed and direction will be undertaken and documented. iv. Describe methods for transmitting the data to the relevant site manager(s) in real time to inform the implementation of adaptive management of dust or odour sources. v. Detail a Trigger-Action-Response Protocol (TARP) that defines the methods of reviewing and adapting activities in response to the monitoring data if any triggers are exceeded.	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	vi. Outline the approach for reviewing the monitoring data on a monthly basis at each site, or more often, for the purpose of assessing the effectiveness of the RMMP for each site and making adjustments to the monitoring methodology as necessary to improve the ability to implement the RMMP. vii. Document a process for daily and weekly review of planned activities and forecasted environmental conditions to identify whether any particular construction activities planned need to be rescheduled or monitored more closely than usual, or whether additional mitigation controls are required to proactively address potential risks of impacts from air pollution. viii. In accordance with the requirements of the approved EMF, document a process to make publicly available on a project website: • real-time air quality monitoring results (with explanation of the limitations of unverified data); and • verified monthly air quality monitoring results, to be published within one month after the end of the relevant month. d) Describe processes for identifying opportunities for continual improvement in management of air quality impacts from construction. e) Document how any processes and measures to be implemented as part of the Communications and Stakeholder Engagement Plan would be considered in implementation of the EAQPDMP including: • managing matters of interest raised by key stakeholders through development and implementation of the CSEP; • sharing information regarding how implementation of the RMMP has adapted work practices on site; and • measures concerning complaints management (see SC2). f) Detail of the complaints management system, consistent with the requirements of EMF4. 3. Following a 12 month trial period, provide relevant information to enable the IEA to verify the utility to the affected community of making the real time air quality monitoring data publicly available. If the trial is extended, provide relevant information to the IEA to enable annual verification by the IEA of the utility to the affected community of making the real time air quality monitoring data publicly available.			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
AQ2	**Monitor air quality prior to and during construction** 1. As part of the implementation of the Risk Management and Monitoring Plan required by AQ1: a) Conduct instrumental monitoring of PM10 concentrations in accordance with or calibrated to AS/NZS 3580.9.8- 2022, or another method selected in consultation with the EPA. Any data collected using AS/NZS 3580.9.8- 2022 must be adjusted using a temperature factor in accordance with the National Environment Protection (Ambient Air Quality) Measure Technical Paper No. 10 as required by EPA Publication 440.1. Monitors should be positioned at a location representative of the likely highest impacts at or outside the boundaries in the direction of sensitive receptors in accordance with AS/NZS 3580.1.1- 2016 for each of the following locations: i. SRL station at Cheltenham ii. SRL station at Clayton iii. SRL station at Monash iv. SRL station at Glen Waverley v. SRL station at Burwood vi. SRL station at Box Hill vii. Stabling Facility as well as at a representative control site or sites. 2. Measure wind speed and direction at each monitoring site in accordance with AS/NZS 3580.14:2014, noting measuring of wind speed and direction is not required at the representative control site(s). 3. Publicly report real time air quality monitoring and provide verified monthly air quality reports as set out in the RMMP, as per AQ1.	All stations Stabling Facility	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
Arboriculture				
AR1	**Develop and Implement a Spatial Tree Inventory Database** 1. Develop and implement a spatial tree inventory database for all trees in proximity to works. Trees to be assessed must include all trees within the project boundaries and any trees outside of the project boundaries where their TPZ would encroach on the project boundary by more than 10%. 2. Assess each tree individually to provide for each tree having its own record. 3. Measure trunk DBH and DAB for accurate calculation of TPZs and SRZs in accordance with AS4970-2009 Protection of Trees on Development Sites. 4. Ensure tree assessment criteria should as a minimum include botanical name, common name, height, canopy width, DBH, DAB, health, structure, useful life expectancy and arboricultural retention value (including social value). 5. Complete the tree inventory database in stages as works progress. Tree assessments should not be more than 2 years old when the project works begin in any particular area. 6. Update and record new features in the database as required, as well as retaining historical records. 7. Record each tree location in the database and utilise its surveyed location as recorded when the feature survey is completed. 8. Include native trees in the tree inventory database to ensure consistent numbering for native vegetation requirements in accordance with EC1 and EC2.	All	Design Construction Operation	SRLA (develop database) Contractors (implement)

Number	Environmental Performance Requirement	Project component	Timing	Implementation
AR2	**Develop and implement Tree Removal Plans** 1. Develop and implement Tree Removal Plans, as part of the CEMP, in consultation with affected land managers, that identifies all trees within the Project Land and includes: a) Trees to be removed or retained as part of the works b) The condition and arboricultural value of the amenity trees to be removed c) The canopy area of all trees to be removed. 2. Maximise tree retention so far as reasonably practicable through detailed design and selection of construction methods to minimise canopy loss and in accordance with EC1. 3. Ensure arboricultural assessments verify existing details and inform the detailed design, Tree Removal Plans and Tree Canopy Replacement Plan (required by AR4) in order to maximise tree retention and long-term viability of amenity plantings in accordance with Australian Standard AS4970:2009 Protection of Trees on Development Sites. 4. Inform the Tree Removal Plans by a pre-construction site assessment in consultation with the relevant land manager and/or local council to confirm the area and number of trees and other vegetation proposed to be impacted. Trees to be retained must be protected in accordance with AR3. 5. Ensure tree and vegetation removal occurs in a staged manner with removal only occurring once necessary for the current stage of works. 6. Describe the reuse opportunities for trees sought to be removed for the Project in the Tree Removal Plans in consultation with local Council and affected land managers. 7. Confirm the area and number of trees and other vegetation actually removed through a post-construction assessment and published on the Project website.	All	Design Construction	Contractors
AR3	**Develop and implement Tree Protection Plans** 1. Develop and implement Tree Protection Plans, as part of the CEMP, in consultation with affected land managers, in accordance with Australian Standard AS4970- 2009 *Protection of Trees on Development Sites*. 2. Provide details of any tree protection actions for the Tree Protection Plans to avoid and minimise impacts of construction or related activities on trees proposed to be retained, so far as reasonably practicable, prior to those works being undertaken.	All	Design Construction Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	3. Prepare Tree Protection Plans based on detailed construction drawings and surveyed tree locations and in accordance with EC2. 4. Include protection of the following trees in the Tree Protection Plans: a) River Red Gum (*Eucalyptus camaldulensis*) (CH-8113) at 66 Mattheison Street, Cheltenham b) Peppercorn Tree (*Shinus molle*) (CL-4056) at the existing Clayton Station c) Lone Pine (*Pinus halepensis*) (CL-2189) at the Clayton Remembrance Gardens 5. Monitor trees subject to protection for a 3-year period following completion of construction works in that location to assess ongoing viability, with maintenance or replacement of stressed or damaged specimens to be undertaken in accordance with AR4.			
AR4	**Develop and implement a Tree Canopy Replacement Plan** 1. Develop and implement a Tree Canopy Replacement Plan to replace double the amount of tree canopy cover (m^2) removed as a result of the Project in each local government area by 2050. 2. Ensure the Tree Canopy Replacement Plan: a) Is developed in consultation with councils and other relevant land managers, in accordance with best practice, and in line with the UDS, relevant UDLPs, and relevant local government masterplans b) Shows the location, size (including canopy spread modelled to 2050) and species of replacement trees, including locally indigenous species as required by EC1. Replanting of trees must be compliant with AS2303:2018 (Tree Stock for Landscape Use). c) Demonstrates how each station, the Stabling Facility and the Emergency Support Facility will contribute towards their doubling of tree canopy removed. d) Specifies requirements to support the long-term viability and growth of all replacement trees including appropriate deep soil requirements, 3-year establishment works, water sensitive urban design where practicable, and ongoing maintenance and protection. e) Adopts the following replacement tree planting hierarchy: i. Within the Project Land at each station site and at the Stabling Facility and Emergency Support Facility – as first priority, in locations as close as feasible to where trees were removed, prioritising canopy in high pedestrian foot traffic and hard paved areas	All	Design Construction Operation	Contractors SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	ii. Outside the Project Land and within a 400 m walking catchment from where trees were removed, having regard to: • Areas with low tree canopy cover coupled with high heat impacts • Areas that are socially vulnerable to heat impacts • Areas where shade is needed to promote pedestrian and cycling activity • Areas within open space, waterways and along streets where biodiversity corridors or habitat links can be established. iii. Within Victorian Government and local Council land within the local government area that the trees were removed. f) Includes understorey plantings within the Project Land in addition to the tree canopy replacement plantings where feasible in consultation with councils and/or affected land manager g) Specifies that any planting in accordance with the Tree Canopy Replacement Plan is in addition to any other (non-SRL) planting program. h) Specifies the responsibility for planting and ongoing maintenance and monitoring of trees and understorey planted under the Tree Canopy Replacement Plan in consultation with relevant stakeholders for the 3-year establishment period or timeframe agreed with the landowner, after which time the land owner will maintain the trees. 3. Detail how the Tree Canopy Replacement Plan interim progress towards the doubling of tree canopy cover target is to be monitored, modelled and reported against annually during Project construction, taking into account early plantings outside the Project Land. The Plan must also detail the contingency measures to be implemented if interim reporting shows the targets will not be met. 4. Develop a draft Tree Canopy Replacement Plan prior to the commencement of works and finalised on completion of relevant approved UDLPs. 5. Commence the replacement planting of trees as soon as possible and in stages once the tree removal extent is confirmed and suitable replacement sites have been determined in consultation with relevant local governments and authorities. 6. Conduct modelling and reporting at the completion of the Project to confirm extent of tree removal and that the Tree Canopy Replacement Plan will achieve a doubling of tree canopy cover removed for the Project target. Any shortfall in tree canopy replacement will need to be addressed through additional planting before the EPR can be achieved.			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	7. Provide replacement tree canopy in accordance with the Tree Canopy Replacement Plan.			
Business (including retail and education centres)				
B1	**Minimise disruption to businesses, including from acquisition** 1. Minimise disruption to businesses, including from land acquisition by working with affected businesses to endeavour to reach agreement on terms of possession in accordance with relevant legislation.	All	Design Construction	SRLA
B2	**Provide support to businesses that are relocating due to acquisition** 1. Implement the measures set out in the SRL Business and Residential Relocation Support Guidelines for all eligible businesses, (unless a business has elected to not seek additional assistance beyond what is provided under the relevant legislation), to provide as a minimum: a) Consultation with owners and tenants of commercial properties: i. to enable the implications and options for relocation to be fully understood by all parties; and ii. providing appropriate time to allow the businesses to relocate. b) Individualised assistance to displaced businesses with their relocation which may include the engagement of professional advisory services including marketing, language, financial planning, accounting and management as appropriate. c) Regular consultation with the relevant Councils at all stages of the process. 2. Implement measures that support businesses with specific relocation needs such as, but not limited to, medical services, businesses that are part of a supply chain, businesses with regulatory requirements, and businesses where the customer base is location specific.	All	Design Construction	SRLA
B3	**Prepare and implement a Business Disruption Mitigation Plan** 1. Prepare an overarching Business Disruption Mitigation Framework (BDMF) in accordance with the Victorian Small Business Engagement Guidelines (produced by the Victorian Small Business Commission) to outline the approach to manage and mitigate business disruption from the Project to the extent reasonably practicable. The BDMF must address disruption to business access for customers, visitors, suppliers or waste collection and management of amenity impacts on businesses.	All	Construction	SRLA (Prepare BDMF) Contractors (develop and implement BDMPs)

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	2. Develop and implement localised Business Disruption Mitigation Plans (BDMP) that comply with the BDMF and the SRL Business Support Guidelines. SRLA will work with the contractors to oversee the implementation of the BDMP and ensure the implementation of business support as outlined in the SRL Business Support Guidelines, with particular emphasis on: a) Promotion and marketing to encourage patronage of businesses in proximity of construction sites. b) Targeted or 'bespoke' support to highly impacted and disrupted businesses to enable businesses to overcome detrimental effects on business health. c) Ensuring businesses receive adequate notice of construction works and phases, including estimated timeframes/programs. d) Making financial planning services and/or assistance available to highly impacted and disrupted businesses. 3. Include the following in the BDMPs: a) Measures as far as practicable to ensure construction traffic avoids sensitive commercial areas. b) Details of any changes to traffic and parking conditions and durations of change. c) A Project construction schedule developed in consultation with transport authorities, local councils and affected businesses to minimise cumulative impacts of this and other independent projects. d) A process for notifying customers of proposed changes to business operations such as access, operating hours and amenity, including the settling of suitable timeframes for notification prior to commencement of works that cause the change in business operations. e) Specific measures for supporting affected businesses during construction. f) Consideration of potential requirements for cleaning of streets, public areas, street furniture, commercial premises and shopfronts to mitigate any impacts of construction activities directly caused by the Project. 4. Ensure SRLA and the appointed contractor work with businesses to minimise impacts to business operations from utility relocation or disruptions and to mitigate the impact or any business disruption. 5. NOTE: The measures set out in the overarching BDMF and location-specific BDMP are in addition to the implementation of noise, vibration, EMI, air quality, urban design, traffic and social impact related EPRs.			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
B4	**Undertake proactive business engagement** 1. Develop and implement a tailored and proactive approach to engaging with trader associations and businesses affected by construction, as part of the communications and stakeholder engagement plan developed for SC2. This approach must include: a) Regular and timely reporting of design and construction activities and key projects timelines b) Provision of adequate and advance notice about changes to traffic and parking conditions and duration of impact. c) Timely provision of relevant information, including responses to issues raised by the group. d) Regular reporting and monitoring of business community feedback, impacts and discussion of mitigation measures and their effectiveness. e) Measures to effectively engage with Culturally and Linguistically Diverse (CALD) business operators and owners. f) Annual surveys to assess visitation impacts on businesses, including surveying stakeholders such as customers and visitors to Clayton, Glen Waverley and Box Hill. 2. Ensure each of the Clayton, Glen Waverley and Box Hill centres has a dedicated Business Liaison Manager (or similar) to enable continuity and access to advice as appropriate.	All	Design Construction	Contractors
B5	**Provide effective replacement of car parking spaces in Glen Waverley** 1. Replace the car parking spaces lost due to the Project in the Glendale Street carparks and nearby on-street parking in consultation with the City of Monash to provide continued support to traders and visitors within the Glen Waverley Activity Centre. 2. Provide the replacement car parking within the Glen Waverley Activity Centre in a location that minimises traffic impacts on Kingsway between Coleman Parade and Bogong Avenue and has convenient access to Kingsway south of Coleman Parade.	SRL station at Glen Waverley	Design Construction	SRLA
B6	**Develop and implement a strategy to support businesses displaced due to acquisition in Box Hill** 1. Develop and implement a strategy to support the businesses that are displaced from Box Hill due to acquisition and assess options for how they can be retained in the Box Hill Metropolitan Activity Centre. The strategy is to be informed by consultation with the business to be displaced by the Project, and Whitehorse City Council.	SRL station at Box Hill	Design Construction	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	2. Ensure the strategy includes consideration of major redevelopment proposals in proximity to the SRL Station at Box Hill. 3. Ensure the strategy has regard to the established cultural attributes of the Box Hill MAC and the maintenance of the cultural life of the centre during the construction period of the Project.			
B7	**Support businesses with sensitive equipment in operation** 1. Support continuity of existing businesses with sensitive equipment potentially affected during operation of the Project.	All	Operation	SRLA
B8	**Develop a business and commercial property purchase scheme** 1. Prepare and implement a scheme that provides the opportunity for voluntary purchase of business or commercial properties that satisfy defined criteria relating to the duration of construction impacts and the significance of those impacts on business viability. The scheme must include principles and criteria for eligibility for business or commercial properties which are developed having regard to: a) Proximity of the business or commercial property to major construction works, and likely or actual extent and duration of proximate works; b) access constraints, including visibility of the business property to passing pedestrian or vehicular traffic; c) cumulative effects of construction concurrent with other major developments in close proximity to the business or commercial property; and d) cumulative impacts on the viability of the business at the business or commercial property. e) special needs or circumstances of the owner of the business or commercial property.	All	Construction	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
B9	**Develop an Employee Assistance Strategy** 1. Develop and implement an Employee Assistance Strategy to provide relevant workforce support measures for employees of businesses closing or relocating as a consequence of acquisition for the Project. 2. Ensure the strategy includes, but is not limited to: a) The identification of affected businesses and employees b) Provision of co-ordinated information on support services for affected employees (for example, access to a range of services such as training advice, careers advice, resume workshopping, information about government entitlements, referral to other job support services, and skills assessments). Information and access to services should ensure appropriate support for and engagement with employees of culturally and linguistically diverse backgrounds. c) The identification of relevant government agencies and support services d) Procedures to disseminate information regarding the employee assistance strategy and services, key project milestones that may impact on business closures and relocations, and other changes that may affect businesses and their employees during the closure of existing operations. 3. Prepare and implement, in parallel with the Employee Assistance Strategy, and with appropriate expert advice, a package of individual employee assistance plans prepared with and for each employee who requests it, in consultation with the employer, that: a) Understands their future employment plans or intentions b) Provides for training and development, including access to language training services for culturally and linguistically diverse employees who seek this assistance c) Identifies factors that would influence their desire to remain employed with a business in the relevant activity centre or local government area d) Provides practical and reasonable assistance to implement their assistance plan.	All	Construction	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
Contaminated Land				
C1	**Environmental investigation, monitoring and reporting** 1. Undertake additional investigations to ensure that all baseline conditions are identified and recorded to address the specific data gaps identified in Section 10 of Technical Appendix F.2 to the exhibited SRL East EES and to inform the detailed design or for environmental monitoring during the construction phase. The additional investigations must include the preparation of the following documents: a) Sampling workplans (including sample analysis quality plans (SAQP) as set out in the NEPC 2013 National Environmental Protection (Assessment of Site Contamination) Measure 1999 (amended 2013) and subordinate legislation and standards for each project component b) Investigation reports (including soil, groundwater and acid sulfate/rocks) in accordance with applicable Commonwealth and Victorian legislation detailing the assessment of specific data gaps to demonstrate that the extent of contamination for each study area has been adequately characterised c) A report which establishes and documents baseline contamination levels for stockpile areas to inform the Spoil Management Plan under C3 d) Routine monitoring reports.	All	Design Construction	Contractors
C2	**Develop and implement a Contaminated Land Management Plan** 1. Develop and implement a Contaminated Land Management Plan (CLMP) in consultation with the EPA and other key stakeholders (where appropriate) in accordance with the EP Act and subordinate legislation, as set out in EPA Victoria guidance documents on assessing and managing contaminated land (Assessing and controlling contaminated land risks (EPA Publication 1977), Proposed methodology for deriving background level concentration when assessing potentially contaminated land (EPA Publication 1936), Civil construction, building and demolition guide (EPA Publication 1834) and Construction – guide to preventing harm to people and the environment (EPA Publication 1820.1), the Environmental Reference Standards (as amended or replaced from time to time)) and best practice guidance National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended 2013). 2. Include (but not be limited to) the following in the CLMP: a) Summary of applicable regulatory requirements b) Description of roles, responsibilities and record keeping requirements	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	c) A program for the updating of the CLMP for different stages of construction through to completion d) Measures and work methods for excavation and piling works for the management of odorous soils (AQ1) and groundwater to prevent contaminant plume movement towards sensitive receptors (refer to GW1 and GW3) so far as reasonably practicable e) Measures for the management of contaminated land so far as reasonably practicable f) Details of any further characterisation of the land (including groundwater) to be disturbed or impacted by the works including the development of a SAQP, conceptual site models and risk-based interpretation of the data (as required by C1) g) Identification of issues and appropriate management measures for residual risks of construction spoil that will become a waste and require management through construction (EPA Publication 1834) h) If unacceptable residual risks are identified or as required for re-use of spoil (C3), prepare a remedial options assessment (ROA) and further, if required, prepare and implement a Remedial Action Plan (RAP) and remedial designs i) Measures to prevent contamination of areas used for temporary construction works and to remediate any contamination caused by temporary construction activities in consultation with the relevant land manager j) Contingency and Unexpected Finds Plan (CUFP) in relation to contaminated land including the identification of responsibilities, training, staff induction, typical unexpected finds and responses, notification(s), and reporting requirements k) Establishment of a process for two-way communication between the contractor and stakeholders who are in management of contaminated land to facilitate sharing of information and data about contaminated land, groundwater or ground gas related issues which may arise. The process should include a clear point of contact through which third parties can raise issues and concerns, or request information and data l) Establishment of a process to mediate disputes or disagreements.			
C3	**Develop and implement Spoil Management Plans** 1. Develop and implement Spoil Management Plans (SMPs) in consultation with the EPA Victoria and other key stakeholders (where appropriate) in accordance with SRLA's Spoil Management Strategy (Appendix C of the Contamination Assessment Technical Report or as amended and verified by the IEA), the EP Act and subordinate legislation, and EPA Publications Civil construction, building, and	All	Design Construction	SRLA Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	demolition guide (EPA Publication 1834) and Construction – guide to preventing harm to people and the environment (EPA Publication 1820.1) (as amended or replaced from time to time), subject to: a) The updated Spoil Management Strategy (SMS) needs to be reviewed by EPA and must adequately address any comments provided by EPA. Once satisfied that any comments from EPA have been adequately addressed, the IEA will verify the SMS. b) Each Spoil Management Plan (SMPs) needs to be reviewed by EPA and must adequately address any comments provided by EPA. Once satisfied that any comments from EPA have been adequately addressed, the IEA will verify each SMP. 2. Transport offsite for treatment, reuse or disposal any spoil generated by the project that cannot be reused on site. If temporary storage is proposed for more than 30 days, an environmental risk assessment must be undertaken to determine if storage is safe, or the spoil needs to be transported offsite. Do not consider temporary spoil storage for gasworks-derived waste fill, classed as Prescribed Waste, excavated from the SRL Cheltenham Station site, nor shall such Prescribed Waste (gasworks-derived waste fill) be placed at other project sites. 3. Address the management of all spoil to maximise reuse so far as reasonably practicable in the SMP and include processes and measures to manage spoil generated through construction and transportation offsite to a lawful place. The SMP must include but is not limited to: a) Summary of applicable regulatory requirements b) Description of roles and responsibilities c) A program for the updating of the SMP for different stages of construction through to completion with the updates relating to construction activities still to be completed d) Description of the approach to site investigation to characterise the spoil (such as Fill Material, industrial waste, reportable priority waste and waste acid sulfate soil) if required, including the development of a SAQP as per C1 e) Develop conceptual site models and waste categorisation to meet EPA Victoria requirements to classify spoil for disposal or re-use as required f) Details of reuse options for all categories of spoil expected to be generated through construction g) Details of management measures to be implemented for sustainable handling and transport of spoil for the protection of human health and the environment			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	h) Details of design and specific environmental management plans (EMPs) for temporary stockpile areas and stockpile activities including but not limited to containment of stockpiled materials to prevent any impact to human health or the environment. The EMPs for temporary stockpile areas should also include a project closure report indicating the site has been appropriately managed and restored to its pre-existing contamination baseline, so far as reasonably practicable. i) Details of appropriate lawful places (including offsite reuse and disposal facilities) for the receipt of waste and identify any permissions required in accordance with the *Environment Protection Regulations 2021* j) Description of sampling approach in accordance with *Soil sampling* (EPA Publication IWRG702) k) Description of the approach to determine the waste categories in accordance with *Waste disposal categories – characteristics and thresholds* (EPA publication 1828.2) (as amended or replaced from time to time) l) Details of monitoring and reporting requirements m) Consideration of cumulative effects of waste spoil disposal from other Major Transport Infrastructure Projects n) CUFP in relation to spoil, including the identification of responsibilities, training, staff induction, typical unexpected finds and responses, notification(s), and reporting requirements.			
C4	**Develop and implement a Hazardous Ground Gases Management Plan** 1. Develop and implement a Hazardous Ground Gases Management Plan (HGGMP) in consultation with the EPA and other key stakeholders (where appropriate) and in accordance with the EP Act and subordinate legislation, EPA Publication 1684: Landfill Gas Fugitive Emissions Monitoring Guideline and best practice guidance. 2. Ensure the HGGMP addresses the potential impacts so far as reasonably practicable at the Stabling Facility and other components of the Project where ground gas impacts could be realised, including but not limited to: a) Summary of applicable regulatory requirements b) Description of roles and responsibilities c) A program for the updating of the HGGMP for different stages of construction through to completion	Stabling Facility Tunnels (Kingston LGA)	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	d) Description of the approach to investigate ground gas emissions at the Stabling Facility on the footprint of planned occupied buildings or, if a surcharging ground improvement option is a planned, across the impacted area including near sensitive receptors in order to assess risks from ground gas emissions e) The design and installation (if required) of appropriate gas mitigation measures including relevant construction quality assurance requirements to manage potential impacts so far as reasonably practicable and with reference to *Landfill gas fugitive emissions monitoring guideline* (EPA Publication 1684) and the British Standard BS 8485: 2015+ A1:2019: Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings. This work must be prepared by a suitable technically qualified person and verified by the IEA by an Auditor with expertise in landfill gas migration and mitigation measures. For any produced emissions from future LFG control/mitigation systems, final point sources from such gas capture and treatment systems must treat air emissions in accordance with EPA Publication 788.3 'Siting, design, operation and rehabilitation of landfills' (i.e., the Landfill 'BPEM'), August 2015 (or other versions as updated). f) CUFP in relation to hazardous gases, including the identification of responsibilities, training, staff induction, typical unexpected finds and responses, notification(s), and reporting requirements. The plan will include, as a minimum, site-specific landfill gas risk assessments for unexpected landfills on or in the vicinity of the alignment in accordance with BS8485:2015+A1:2019 Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings. g) Description of the approach to investigate landfill gas emissions at any other landfill along or within the vicinity of the alignment which may become apparent prior to construction.			
C5	**Manage contamination risks during operation** 1. Develop and implement measures for the monitoring and management of contaminated land and constructed or installed hazardous ground gas management systems as part of the Operational Environmental Management Plan (OEMP) under EMF2.	All	Operation	Contractors
C6	**Develop and implement a Potential Acid Sulfate Soil and Rock Management Plan** 1. Develop and implement a Potential Acid Sulfate Soil and Rock (ASS/ASR) Management Plan in consultation with EPA and other key stakeholders, in accordance with the Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulfate Soils (VIC BPMG), National Acid Sulfate Soils Guidance, the EP Act and subordinate legislation. This plan should also consider and be consistent with requirements outlined in Section 7.3.1 Table 7.1 GW3. This plan should include the	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	following: a) Identify locations and extent of any potential ASS/ASR that could be disturbed or otherwise affected by works, including site specific information for areas at risk b) Details of monitoring and reporting requirements c) Characterise ASS/ASR spoil prior to excavation d) Identify and implement measures to prevent oxidisation of ASS/ASR wherever possible e) Identify suitable sites for re-use, management, or disposal of any ASS/ASR with regards to sensitive receptors (wetlands, waterways, and residential areas)			
C7	**Develop and Implement Suitable Air Cover and Treatment Controls for excavation works at SRL Cheltenham station** 1. Conduct excavation and removal under suitable air cover controls with associated treatment as required, for station box bulk excavation of former gasworks waste fill, expected within the top 4 to 5 metres to actively intercept released odours or dust, to ensure that risk of harm to human health and the environmental is minimised so far as reasonably practicable. IEA to verify appropriate assessments to inform and then determine the suitability of cover options and treatment controls 2. For placement of deep diaphragm support walls for the station box, such excavation through the waste fill may occur, prior to any air cover controls being required (provided the exposed excavation is restricted to the active diaphragm wall construction work area).	SRL Station at Cheltenham	Design Construction	SRLA Contractors
C8	**Human Health Risk Assessment – Stabling Facility** 1. Complete a quantitative Human Health Risk Assessment (HHRA), prior the construction of the Stabling Facility, in consultation with the EPA, and the final selection of risk mitigation measures, including: a) inputs from all the site contamination and spoil investigations as available for the Stabling Facility b) revised dust exposure modelling for the construction period (including allowance for any proposed soil surcharge piles) c) dust exposure measurement (baselining) appraisal for the local area, with inputs from this into dust modelling d) having regard to specific local health baselines for the residential population where consultation with City of Kingston confirms this data exists	Stabling Facility	Design Construction	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	2. The HHRA must be prepared in accordance with Environmental Health Risk Assessment – Guidelines for assessing human health risks from environmental hazards (enHealth 2012); or a comparable guideline that is shown to be of equal or better rigor.			
Ecology				
EC1	**Minimise vegetation and habitat removal and disturbance** 1. Develop and implement measures to avoid and otherwise minimise to the extent practicable impacts on native vegetation and fauna habitat (including trees) through detailed design and construction, including: a) Ensure all trees are retained and protected within the Henry Street Reserve and Kingston Walk Linear Reserve, with the exception of select tree removals (if required) as part of the enhancement and landscaping activities. b) Minimise footprint and surface disturbance to areas of revegetation along Gardiners Creek. c) Ensure that at the Monash SRL site, the impact of the Project on trees along the south side of Normanby Road and Scenic Boulevard is minimised. d) Maximise retention of mature trees, planted and remnant native trees and remnant vegetation, particularly large amenity trees (greater than 30 cm DBH) that contribute to faunal habitat in accordance with AR2 and AR3. e) Maximise retention of fauna habitat including standing dead hollow trees and understorey vegetation. 2. Carry out a pre-construction site assessment in consultation with the relevant land manager and/or Council to inform detailed design and to confirm the area and number of trees and other vegetation proposed to be impacted. The area and number of trees and other vegetation actually removed is to be confirmed through a post-construction assessment. 3. Ensure that where appropriate for the landscape and Project location, tree replacement (as required by AR4–Arboriculture) and landscaping uses locally indigenous species, suited to the landscape profile and the setting being revegetated, to maximise habitat value and connectivity for native fauna. This would include requirements to support the long- term viability and growth of all plantings of indigenous species including appropriate soil conditions, establishment works and ongoing maintenance and protection in consultation with Councils.	All	Design Construction	Contractor

Number	Environmental Performance Requirement	Project component	Timing	Implementation
EC2	**Implement vegetation protection measures** 1. Include sub-management plan(s) in the Construction Environmental Management Plan (CEMP) that sets out the requirements and methods for: a) Identification of areas of important flora and fauna habitat to be protected during construction. b) Fencing protected areas and no-go zones to prevent access during construction – fencing should be to a standard agreed with the relevant land manager. c) Pre-construction site assessment to confirm that vegetation and trees to be retained have been adequately protected from impact. d) Vegetation clearing controls and protection measures. e) Development and implementation of a Tree Protection Plan as per AR3. f) Implementation of appropriate measures to manage the risk of the spread and introduction of pest animals, weeds and pathogens during construction. g) Procedures if unexpected threatened species are identified.	All	Design Construction	Contractors
EC3	**Obtain native vegetation offsets** 1. Provide offsets for unavoidable removal of native vegetation in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP, 2017) prior to removal, except as otherwise agreed by the DELWP Secretary.	All	Design Construction	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
EC4	**Implement fauna management measures to minimise impacts to fauna** 1. Include requirements and methods in the CEMP, including any sub-management plans: a) for undertaking pre-clearing inspections to confirm the on-site location of fauna immediately prior to habitat removal; b) for managing native fauna that may be displaced due to habitat removal, in compliance with the Wildlife Act 1975 and in consultation with public land managers where relevant. 2. Design and install construction and operational lighting with regard to Appendix A of the *National Light Pollution Guidelines for Wildlife*, (DAWE, 2020) to manage and minimise off-site amenity effects, including lighting location details and demonstrated minimisation of light spill to areas of fauna habitat including: a) Gardiners Creek b) Kingston Walk Linear Reserve c) Henry Street Linear Reserve d) Jock Marshall Reserve e) Northern and western section of Sir William Fry Reserve. 3. Design, install and manage revegetation surrounding waterbodies at the Stabling Facility (having regard to Appendix A of the National Light Pollution Guidelines for Wildlife) to provide habitat for a diversity of indigenous birds and discourage large flocks of Silver Gulls (*Chroicocephalus novaehollandiae*) from congregating.	All	Design Construction Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
EC5	**Gardiners Creek naturalisation is to be undertaken to improve habitat values** 1. Develop and implement a plan in consultation with Melbourne Water, the local council and other relevant authorities to naturalise the section of Gardiners Creek adjacent to SRL station at Burwood to improve habitat values within and surrounding the Gardiners Creek for indigenous fauna species. This will consider appropriate revegetation with both aquatic and terrestrial indigenous flora species, installation of appropriate instream habitat and waterway design to promote appropriate flow conditions. 2. Incorporate the Plan into the management plan required by SW8 for the naturalisation of Gardiners Creek. The management plan must contain requirements and methods to minimise, to the extent practicable, short and long-term impacts on riparian, riverbed and aquatic habitat to Gardiners Creek downstream of the construction activity required to naturalise the creek.	SRL station at Burwood	Design Construction	SRLA
Electromagnetic interference				
EMI1A	**Process Statements** 1. Apply EMI1-EMI3 to any sensitive receivers including Building 220 (Monash Biomedical Imaging Building) and Building 23 (Senior Chemistry Building) at Monash University Clayton Campus. EMI1-EMI3 do not apply where a process statement: a) Already exists with the owner or occupier of land on which sensitive receivers are located, in which case the terms of the Process Statement prevail, or b) has been prepared in accordance with this paragraph (b), after the Minister for Planning's approval of this EMF, in which case the terms of the Process Statement prevail. Prior to commencing negotiations on a Process Statement, a written statement justifying the unique and specific circumstances requiring the Process Statement must be prepared by SRLA and verified by the IEA. This written statement must include an explanation of the type of sensitive receiver or receivers and its use, and the special circumstances that justifies the need for a Process Statement and be co-signed by the owner or occupier of the land on which the sensitive receiver is located. 2. NOTE: For the purposes of this EPR, a "Process Statement" means an agreement between SRLA and the owner and occupier of land on which sensitive receiver or receivers with unique and specific requirements that necessitate a more tailored approach to addressing specific EMI requirements is located. This may include but not be limited to sensitive research, medical or recording equipment/spaces and sensitive performance spaces.	All	Design Construction Operation	SRLA Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
EMI1	**Develop an Electromagnetic Compatibility (EMC) Management Plan** 1. Develop an Electromagnetic Compatibility (EMC) Management Plan in accordance with AS/RISSB7722:2016 *EMC Management* to inform the design and construction of SRL East (EMC Management Plan), that includes (but is not necessarily limited to) the following: a) A preliminary assessment of electromagnetic emissions or disturbances likely to be caused by the construction and operation of SRL East and the Ultimate Configuration, having regard to: i. Relevant design requirements of SRL East and the Ultimate Configuration; ii. Any matters relevant to electromagnetic emissions or disturbances which SRLA reasonably expects will be implemented in the design, construction and operation of SRL East and the Ultimate Configuration. b) Identification of existing and known and committed future equipment or infrastructure which may be affected by electromagnetic interference (EMI) as a result of the construction or operation of SRL East and the Ultimate Configuration ("sensitive receivers"), having regard to the preliminary assessment carried out pursuant to paragraph (a) above. c) Determination of operational EMI immunity limits for sensitive receivers identified pursuant to paragraph (b) above, having regard to: i. equipment environmental specifications; ii. stakeholder requirements; iii. background EMI levels; and iv. where existing shielding or mitigations are installed. For the purposes of sub-paragraph (i), equipment environmental specifications are either: (1) the equipment manufacturer environmental specifications; or (2) other environmental specifications substantiated by appropriate data and evidence provided by the owner of the equipment, collected by SRLA where it considers appropriate, or a combination of both. (3) Note: Any dispute regarding the appropriateness of the environmental specifications must be determined by an appropriately qualified independent expert, engaged by SRLA, on the basis of all data, evidence and information held or collected by SRLA regarding the relevant sensitive receiver. d) A process for baseline monitoring to identify background EMI levels at sensitive receivers identified pursuant to paragraph (b) above, undertaken in accordance with any relevant manufacturer environmental test requirements where available and in consultation with the equipment owner, or, where reasonable and timely access is not provided for the purpose of	All	Design	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	monitoring, in accordance with an alternative procedure suitable to determine background EMI levels at the relevant sensitive receiver. e) Targeted modelling to confirm whether electromagnetic emissions or disturbances caused by the construction and operation of SRL East and the Ultimate Configuration comply with the operational EMI immunity limits determined in accordance with paragraph (d) above. If the targeted modelling identifies any exceedance as a result of the construction or operation of SRL East or the Ultimate Configuration, design additional or optimised management measures and/or at-source mitigation measures to be implemented in the design, construction and operation of SRL East: i. to avoid the exceedance where reasonably practicable; or ii. if it is not reasonably practicable to avoid exceedance, to reduce the exceedance so far as reasonably practicable. f) Targeted modelling to confirm whether, with the additional management measures and/or at-source mitigation measures designed pursuant to paragraph (e) above in place, electromagnetic emissions or disturbances caused by the construction and operation of SRL East comply with the relevant operational EMI immunity limits. If the targeted modelling identifies any exceedance as a result of the construction or operation of SRL East, design at-receiver mitigation measures in consultation with the owner and manufacturer of the sensitive receiver to avoid exceedance of the operational EMI immunity limit, to be implemented subject to the agreement of the owner of the sensitive receiver. g) A program for regular monitoring of EMI levels at sensitive receivers identified pursuant to paragraph (b) during the construction, testing, and commissioning of SRL East. h) A procedure for the review and updating of the EMC Management Plan having regard to the outcomes of monitoring and, where relevant, any data or evidence provided by stakeholders in respect of electromagnetic emissions or disturbances caused by the construction and operation of SRL East, including to provide for the design of additional or optimised management measures, at-source mitigation measures, and/or at-receiver measures in accordance with paragraphs (e) and (f) above if operational EMI immunity limits determined in accordance with paragraph (d) are not met during the construction, testing and commissioning of SRL East. 2. NOTE: For the purposes of this EPR, 'known and committed future developments or infrastructure' is any future development or infrastructure for which it can be demonstrated that the stakeholder had a formal commitment or plan as at 5 August 2022.			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
EMI2	**Design and construct SRL East in accordance with the Electromagnetic Compatibility Management Plan** 1. Design and construct SRL East in accordance with the EMC Management Plan, including through: a) Incorporating the at-source mitigation measures identified in the EMC Management Plan, or other reasonably practicable measures of equal or better performance having regard to the operational EMI immunity limits identified in the EMC Management Plan, into the design of SRL East; b) Implementing the at-receiver mitigation measures identified in the EMC Management Plan, or other measures of equal or better performance having regard to the relevant operational EMI immunity limit identified in the EMC Management Plan, subject to the agreement of the owner of the sensitive receiver; c) Conducting monitoring in accordance with the EMC Management Plan.	All	Design Construction	Contractors
EMI3	**Manage and monitor EMI levels during operation** 1. Develop and implement an EMI Operational Plan for operational activities that addresses the following: a) Maintaining SRL-wide EMI control based on the EMC Management Plan prepared in response to EMI1, considering the operational EMI immunity limits and management and mitigation measures identified in the EMC Management Plan; b) A testing and monitoring strategy, with testing and monitoring to be undertaken during operation to monitor performance of the management and mitigation measures identified in the EMC Management Plan; c) Remedial action to be undertaken if operational EMI immunity limits identified in the EMC Management Plan are not met during the operation of SRL East; d) Providing EMI and electromagnetic field (EMF) data from SRL East to stakeholders who are in the process of planning new sensitive receivers andhad no formal commitment prior to the 5 August 2022, to inform the design and required mitigation of new sensitive receivers and associated facilities, if required.	All	Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
Ground movement				
GM1	**Develop, maintain and update geological and groundwater models, predict ground movements, and determine acceptability criteria.** 1. To inform the design of tunnels, cross passages, shafts, stations, and portals: a) Develop and maintain Ground Movement Models that are informed by geological and groundwater models (as per GW2) which: i. Inform tunnel design and the construction techniques to be applied for the various geological and groundwater conditions ii. Inform assessment of potential ground movement from excavation iii. Inform assessment of potential ground movement from changes in the groundwater levels iv. Are reviewed as the ground conditions are further exposed by investigations, excavation works or assessment of the monitoring results, and revised if needed b) Identify the structures (including residences and other buildings), rail tracks for trains and trams, road pavement, landfills (including landfill liners), utilities and public infrastructure assets (referred to collectively as 'assets' in GM1- GM4) that might be affected by ground movement predicted from the models, and establish their structural forms c) Predict ground movements during construction and when post-construction effects would stabilise to determine potential impacts on affected assets 2. Determine appropriate acceptability criteria in consultation with relevant stakeholders, local councils, and land managers, and which build upon the assumptions for criteria presented in the EES. 3. Develop impact assessment processes and acceptability criteria generally consistent with the *Tunnel Design Guideline* (Australian Tunnelling Society / Engineers Australia, September 2020). 4. Undertake stakeholder engagement activities in accordance with the Community and Stakeholder Engagement Plan required by SC2.	All	Design Construction Post-construction	Contractors
GM2	**Measure seasonal ground movements and conduct condition surveys** 1. Conduct ground movement measurements or obtain records of ground movement over a sufficient period of at least four seasons (one year) before construction to establish any background level	All	Design Post-	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	changes, including seasonal effects. 2. Develop and maintain a database of all assets within the Project Land which are predicted to be affected by ground movement based on the results of GM1. 3. Undertake, subject to receiving asset owner consent to undertake the survey, on reasonable terms, pre-construction and post-construction condition survey(s) for the assets predicted to be affected by ground movement based on the results of GM1, or where an asset owner reasonably expects to be potentially affected and has requested a pre-excavation condition survey. 4. Update the database with condition information for each surveyed asset. 5. Share pre-excavation and post-construction condition assessments and records of consultation with the asset owners.		construction	
GM3	**Develop, implement and maintain Ground Movement Plans** 1. Design and construct permanent structures and temporary ground support measures to limit ground movements to within the acceptability criteria during and after the construction phase. 2. Develop and implement a Ground Movement Plan(s) that: a) Addresses the location of assets which may be susceptible to damage by ground movement resulting from Project works, having particular regard to heritage places (HH4) b) Identifies appropriate ground movement impact acceptability criteria for assets, including for buildings, utilities, rail tracks for trains and trams, road pavement and landfills (including landfill liners), after consultation with the various stakeholders (GM1) c) Identifies mitigation measures to ensure acceptability criteria can be met (this GM3) d) Identifies techniques for limiting settlement of buildings and protecting buildings from damage. Where these may apply to heritage places, they should be developed in consultation with Heritage Victoria and the relevant local council (as applicable) (GM1) e) Addresses additional measures to be adopted if acceptability criteria are not met, such as repair of any damage (GM4) f) Establishes ground movement monitoring requirements and duration for the area surrounding proposed Project works and at the location of affected assets to measure consistency with the predicted model, including criteria related to predicted movements and acceptable movements g) Includes planned mitigation measures where monitoring results indicate that predetermined ground movement trigger levels could be breached	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
GM4	**Undertake repair works to assets impacted by ground movement** 1. Undertake any required repair works or other actions as agreed with the landowner, land manager or asset manager for assets (including natural landscapes and parklands) impacted by ground movement as a result of the Project. For places on the VHR, consultation with Heritage Victoria and the relevant local council must occur (as applicable). For places with a Heritage Overlay, consultation with the relevant Council must occur. 2. Undertake any required repair works as soon as reasonably practicable after the completion of Project construction work that could affect the assets and once monitoring shows any ground movement has stabilised. 3. Establish an independent mediation process for the assessment of claims relating to damage from ground movement to operate up to three years after tunneling and the construction of the permanent linings of SRL structures that potentially affect the relevant asset.	All	Post-construction	Contractors SRLA (establish independent mediation process)
Groundwater				
GW1	**Design underground structures to minimise groundwater changes** 1. Design underground structures to minimise changes to groundwater levels during construction and operation, in order to avoid and minimise impacts on receptors (existing bores and ecosystems), ground movement, potential acid sulfate soils (PASS) activation, and contamination plume migration and vapour intrusion. The design should be informed by the Groundwater Model as required by GW2 and have regard to all available monitoring results (including of monitoring under the Groundwater Monitoring Plan (GMP) required by GW5, if available) and an assessment of material durability (including the potential for acid to be generated by oxidation of acid sulfate soils).	All	Design	Contractors
GW2	**Design and construction to be informed by groundwater modelling** 1. Develop groundwater models through a process that is consistent with the Australian Groundwater Modelling Guidelines (Barnett et al. 2012) and verified by the IEA. Where fate and transport models are required, these should include all input values to enable replication/verification of the fate and transport modelling undertaken. Apply models in the detailed design phase to predict impacts associated with any construction techniques or operational design features proposed during detailed design, and reconfirm that EPRs and mitigation measures are sufficient to mitigate impacts from changes in groundwater levels, flow and quality. 2. Conduct groundwater scenario modelling of current climate conditions as well as projected future climate change conditions over the Project design life, for changes to key processes including sea levels and coastal inundation, evapotranspiration and recharge, to inform the detailed design	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	consistent with GW1. Assessments must be 'based on a comprehensive analysis of the best practicably available information at the time modelling is undertaken to assess the potential impacts of climate change' over the Project's design life, to be consistent with the guiding principles of the *Climate Change Act 2017* (Vic). 3. Regularly update numerical models to achieve transient calibration where suitable data are available, to confirm prediction of cumulative impacts during construction and inform uncertainty assessments, having regard to the results of monitoring carried out pursuant to the GMP prepared per GW5. 4. Utilise results from monitoring carried out pursuant to the Groundwater Monitoring Plan prepared per GW5 during construction to ensure that predictions are accurate both temporally and spatially and mitigation measures are appropriate, and adjust models if required.			
GW3	**Develop, implement, and maintain a Groundwater Management Plan** 1. Develop, implement and maintain a Groundwater Management Plan (GWMP) that details the groundwater management approaches required to identify, avoid and minimise impacts to groundwater levels, flow and quality so far as reasonably practicable and includes relevant aspects from GW5. 2. Base the GWMP on the detailed design Groundwater Model, and include the following: a) Mitigation measures to be implemented if drawdown at existing active groundwater wells used for consumptive purposes exceeds acceptable levels (greater than a 10% reduction in available drawdown in the well). A consistent methodology must be developed to assess these impacts. b) Mitigation measures to be implemented if drawdown at existing active investigation/observation wells are such that bores can no longer be used for observation or sampling c) Mitigation measures to manage oxidation of potentially acid sulfate soils or manage acidic groundwater consistent with the Potential Acid Sulfate Soil and Rock Management Plan required by C6 d) Mitigation measures for maintaining quantity and quality of groundwater contribution to groundwater dependent ecosystems where there is predicted to be an unacceptable change in groundwater levels, flow or quality e) An approach developed in consultation with EPA Victoria to minimise risk of harm so far as reasonably practicable from contaminant migration (including vapour intrusion into underground structures such as Project structures and third-party deep basements)	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	f) Measures to address groundwater contamination if found to be present in any areas of potential groundwater drawdown, to minimise risk of harm so far as reasonably practicable from contaminant migration g) Identification of groundwater drawdown trigger levels at which mitigation must be implemented to protect receptors and sensitive sites h) A GMP in accordance with GW5, appropriate to identify changes early so that mitigation can be implemented to avoid impact to the environment and human health i) Contingency measures to be implemented where unexpected groundwater conditions are encountered. 3. Develop the GWMP in consultation with the EPA Victoria, relevant water authorities and stakeholders, including major groundwater users, and reference the Contaminated Land Management Plan (see C2). It must also be undertaken in accordance with the Groundwater Disposal Strategy where relevant (see GW4). 4. Review the GWMP annually or at frequency as determined with the IEA to confirm the plan is adequately addressing impacts of works as they progress to different stages and as sections are completed, and to review the need to commission additional monitoring bores or to decommission monitoring bores, subject to approval from Southern Rural Water.			
GW4	**Develop and implement a Groundwater Disposal Strategy** 1. Develop and implement a Groundwater Disposal Strategy for the construction phase of the Project, in consultation with relevant water authorities and other relevant stakeholders. 2. Apply the waste management hierarchy to the disposal strategy to be consistent with the EPA waste management regulations, and include: a) Identification of primary discharge location, daily discharge volumes and treatment requirements b) Monitoring plan to ensure that groundwater quality meets disposal criteria c) Contingency measures if capacity of primary discharge location is exceeded, particularly during extended wet periods d) Measures for collection, treatment and disposal of groundwater seepage during construction in accordance with the EP Act waste management hierarchy.	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	3. Obtain a trade waste agreement from the relevant water authority where disposal to sewer is required or approval from EPA Victoria and the relevant water authority (as required) if discharge to waterways or groundwater recharge is determined to be appropriate.			
GW5	**Develop, implement and maintain a Groundwater Monitoring Plan** 1. Prior to commencement of construction works that may impact groundwater, develop, maintain and implement a groundwater monitoring plan as part of the GWMP and in accordance with C1. The monitoring plan should establish baseline water level, flow, and quality for an area at least equal to the modelled drawdown extent around the construction works. Groundwater monitoring data should be used to inform the development and update of the groundwater model(s) prepared in accordance with GW2. 2. Detail sufficient monitoring of groundwater levels, flow and quality in the plan to assess impacts including: a) Reduction in access to groundwater for consumptive well owners b) Impacts which affect the ability to observe and sample groundwater in existing third-party investigation wells c) Reduction in groundwater contribution to groundwater dependent ecosystems d) Contaminant migration or vapour (including landfill gas) intrusion to underground structures caused by drawdown or induced groundwater flow e) Activation of PASS and groundwater acidification f) Disposal of groundwater inflows. 3. Ensure the plan: a) enables calibration and verification of the predictive model, and to inform changes to the model, prepared pursuant to GW2 b) enables early identification of changes so that mitigation can be investigated and if necessary implemented to avoid impact receptors or sensitive sites c) details sufficient monitoring of groundwater to verify that groundwater levels, flow and quality are recovering (or have recovered) as predicted post-construction	All	Construction Post-construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	d) Require relevant key stakeholders to be alerted in the event that triggers are exceeded or unexpected changes in groundwater level, flow or quality are detected during monitoring 4. Align the GMP with the Surface Water Management Plan and the water quality monitoring program (SW1 and SW7) where the GMP (GW3) identifies a potential impact on a Groundwater Dependent Ecosystem, 5. Implement and maintain the plan during construction and for a minimum of five years following the completion of tanking (once watertightness is achieved), or until an independent Statutory Environmental Auditor, appointed pursuant to section 208 of the EP Act, verifies that groundwater is recovering (or has recovered) to a satisfactory level. Assessment of recovery must take into account prevailing climatic conditions and natural variability flow. 6. Provide the data collected under the GMP to DELWP (as the manager of the at State-wide database Water Measurement Information System) at least annually, to be made accessible to the public via the State-wide database Water Measurement Information System, including provision of water quality and contamination testing results from sampled water bores.			
GW6	**Manage groundwater during operation** 1. As part of the OEMP, develop and implement a strategy for management, monitoring (informed by the monitoring program developed in GW5), reuse where possible and disposal of groundwater inflows during operation. The strategy must apply the waste management hierarchy, be consistent with the waste management regulations and guidance provided by EPA, and include: a) Identification of primary discharge location, daily discharge volumes and treatment requirements b) Monitoring plan to ensure that groundwater quality meets disposal criteria and does not pose unacceptable impacts to water quality in local waterways and water bodies c) Consistency with the wastewater management controls in SW6 d) Contingency measures and emergency response plans if unexpected groundwater volume or contamination is encountered and requires disposal. 2. A trade waste agreement should be obtained from the relevant water authority where disposal to sewer is required or approval from EPA and the relevant water authority (as required) if discharge to waterways or groundwater recharge is determined to be appropriate.	All	Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
Historical Heritage				
HH1	**Design and construct to avoid and minimise impacts on heritage** 1. Undertake detailed design and construction planning of the temporary and permanent works to avoid and/or minimise impacts so far as reasonably practicable on the historical cultural heritage values of heritage places in consultation with Heritage Victoria and/or local governments (as applicable).	All	Design Construction	Contractors
HH2	**Undertake works to protect and manage heritage places and fabric** 1. Develop and implement a) Physical protection measures for potentially affected heritage places, structures or features as appropriate b) Where required, a methodology for any required dismantling, storage, relocation or reinstatement of heritage fabric (with reference to the ICOMOS Burra Charter 2013 and in consultation with the asset owner), prior to commencement of works with the potential to affect heritage places, structures or features, directly or indirectly, in consultation with the relevant heritage authority.	All	Design Construction	Contractors
HH3	**Undertake archival photographic recording** 1. Undertake archival photographic recording of heritage places (including trees) and their settings, in accordance with Heritage Victoria's specification or guidelines for the archival photographic recording of heritage places, to the satisfaction of the relevant Responsible Authority, prior to commencement of works where heritage places are demolished or modified by the works.	All	Design Construction	Contractors
HH4	**Monitor and manage condition of heritage sites** 1. Undertake pre-construction and post-construction condition survey(s) in accordance with GM2 for heritage places at risk of impact from settlement and structural integrity disturbance as a result of the Project. Measures to manage and monitor potential vibration and settlement impacts on heritage places during construction to be implemented in accordance with the Construction Noise and Vibration Management Plan required by NV3 and the Ground Movement Plan(s) required by GM3. 2. Report the results of monitoring for heritage places to the landowner and the relevant Responsible Authority and take remedial action, if required, to the satisfaction of the Responsible Authority. 3. NOTE: The EPR applies across the Project and to all heritage places at risk of impact.	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
HH5	**Develop and implement an Archaeological Management Plan** 1. Develop and implement an Archaeological Management Plan in consultation with Heritage Victoria for all sites in the Victorian Heritage Inventory, detailing measures to avoid, minimise, mitigate and manage disturbance of archaeological sites and values affected by the Project. 2. Undertake these investigations in accordance with the Guidelines for Investigating Historical Archaeological Artefacts and Sites, Heritage Victoria 2015 and to the satisfaction of the Executive Director, Heritage Victoria. 3. Ensure the Archaeological Management Plan includes: a) Requirements for background historical research, excavation methodology, research design, reporting and artefact management, artefact conservation, and analysis b) Protocols for managing previously unidentified historical archaeological sites discovered during the works	All	Design Construction	Contractors
HH6	**Develop and implement an unexpected discovery protocol** 1. Develop and implement protocols for managing previously unidentified historical archaeological sites discovered during the works in consultation with Heritage Victoria.	All	Construction	Contractors
HH7	**Minimise impact and undertake reinstatement of Box Hill Gardens** 1. Minimise the temporary and permanent footprint of the Project at Box Hill Gardens as required by LUP1. 2. Minimise tree removal and implement tree protection measures as required by AR2 and AR3. 3. Develop and implement a plan to guide the reinstatement of landscape character to the impacted areas of Box Hill Gardens in consultation with the local council and park manager. Recognising the extent of change that has occurred in the eastern half of the Gardens, the plan must reflect and incorporate aspects of the design and character of the gardens as established in the interwar period, including path layout, open lawns and a mix of characteristic exotic and native specimen trees. The timing for implementation of the plan following completion of construction within Box Hill Gardens for SRL East should consider the timing for the commencement of the next stage of SRL, subject to approvals. 4. The plan is to be developed by an appropriately qualified landscape architect including heritage landscape input on the basis of historical research and analysis and with reference to the 2010 Box Hill Gardens Master Plan, or any other plan for Box Hill Gardens adopted and approved by Council.	SRL Station at Box Hill	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
HH8	**Develop a heritage interpretation strategy** 1. Develop and implement a heritage interpretation strategy for heritage places which explores historical and Aboriginal cultural heritage themes and values, in consultation with Heritage Victoria, the relevant local government, Traditional Owners (as applicable) and First Peoples – State Relations. 2. Include site interpretation initiatives for temporary (during construction works) and permanent works in the heritage interpretation strategy. 3. Ensure the heritage interpretation strategy considers the whole of Project, but particularly: a) SRL station at Cheltenham (former Highett Gasworks) b) SRL station at Burwood (Burwood Skyline Drive-In) c) SRL station at Box Hill (multiple potential locations) d) UDS.	All	Design Construction	SRLA
HH9	**Develop and implement external conservation works** 1. Develop and implement a scope of external conservation works for the former Railway Hotel (950-956 Whitehorse Road Box Hill) to the satisfaction of Whitehorse Council. 2. Develop and implement a scope of external conservation works for the following heritage structures which are directly affected by works in consultation with Whitehorse Council: a) South Africa and China Memorial – Whitehorse Road & Watts Street, Median Strip, Box Hill b) Whitehorse Hotel Statue and Portico – Whitehorse Road, Median Strip, Box Hill c) Cr. Ellingworth Commemorative Drinking Fountain – Whitehorse Road, Median Strip, Box Hill d) Three lamp post standards (if affected by works) – Whitehorse Road, Median Strip, Box Hill 3. Review whether it is feasible to safely retain all or parts of the Colonial Gas Association Building and 948 Whitehorse Road in consultation with Whitehorse Council. In the event it is feasible to safely retain all or a portion of the Colonial Gas Association Building and/or 948 Whitehorse Road, conservation works would be undertaken. The priority for retention is the Colonial Gas Association Building.	SRL Station at Box Hill	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
Land use planning				
LUP1	**Minimise design and construction impact on existing land uses** 1. Develop and implement a plan that specifies how the design and construction of the Project minimises impacts on existing land uses as follows: a) Maintains an overall positive balance between negative impacts arising from the temporary and permanent footprint of the Project and benefits arising from the Project's planning and design outcomes on the following land uses: i. retail and commercial activity centres ii. public transport hubs iii. public open space, including pathways iv. industrial precincts v. residential properties vi. community, sporting and recreational facilities vii. other sensitive uses including educational precincts, student accommodation, aged care facilities and boarding / rooming houses. b) Avoid or, where avoidance is not feasible, minimise to the greatest extent practicable, the impacts to existing residential areas by locating new above ground infrastructure, such as electrical substations, in appropriate locations with consideration of the adjoining properties and the possibility for co-location of rail infrastructure facilities where practicable. 2. Avoid construction laydown and permanent infrastructure at or in the Kingston Walk Linear Reserve and the Henry Street Reserve in Heatherton, with the exception of minor landscaping works, including installation of a shared user path. Retain and protect trees in accordance with EC1.	All	Design Construction Operation	Contractors
LUP2	**Develop and implement an Interim Land Use Guideline** 1. Develop and implement an Interim Land Use Guideline for the management of land acquired to facilitate construction, but not required for permanent SRL East infrastructure, prior to the completion of works at relevant sites.	All	Design Construction Operation	SRLA (develop and finalise ILUG) Contractors (to implement the ILUG)

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	2. Develop Interim Land Use Plans prior to the completion of works at relevant sites where required by the Interim Land Use Guideline, consistent with the requirements of the Interim Land Use Guideline, UDS and the EMF. 3. Prepare the Interim Land Use Plans in consultation with the relevant local council, any relevant Government agencies and any Universities (in relation to the interface between the University campus and the nearest SRL station).			
LUP3	**Minimise impacts from the location of services and utilities** 1. Locate services and utility infrastructure in such a way that minimises impacts to existing residential areas, public open space and educational land uses so far as reasonably practicable and which meets the requirements of the utility service providers. This must include consideration of options to co-locate infrastructure where practicable.	All	Design Construction	Contractors
LUP4	**Develop and implement a Public Open Space Framework** 1. Manage effects to public open space from rail and infrastructure works in accordance with the Public Open Space Framework – Rail and Infrastructure prepared for the Project and approved by the Minister for Planning after receiving the advice of the Public Open Space Advisory Panel. 2. Set out principles and actions in the Public Open Space Framework to mitigate impacts on passive, active and planned open space from operation and construction, including replacement of existing public open space permanently lost or occupied for an extended period with new open space of a similar size and quality. 3. Prepare Public Open Space Management Plans in consultation with the landowner, and relevant councils having regard to the advice of the Public Open Space Advisory Panel and engagement with relevant community and user groups, to address specific areas of public open space in accordance with the Incorporated Document and Public Open Space Framework (POSF). The Public Open Space Management Plans must be prepared and approved prior to the commencement of works impacting existing open space, and must: a) Set out the mitigation measures to manage impacts on public open space. b) Set out the timing for the implementation of each of the mitigation measures. c) Where relevant, set out a process for the identification of public open space to replace existing public open space permanently lost or occupied for an extended period, including suitable replacement land in key strategic locations with reference to: i. the location and characteristics of the land	All	Design Construction Operation	SRLA (Develop POS Framework) Contractors (Develop and implement POS Management Plans)

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	ii. relevant approved strategic land use plans and policies, including those within planning schemes iii. existing and proposed public purpose reservations d) Consider the UDS and any existing strategic or master planning affecting the public open space, including any open space policies. e) Consider any relocation of existing infrastructure including recreational facilities and the requirement to maintain access for existing user groups. f) Be informed by engagement with relevant community and user groups. 4. Prepare the Public Open Space Management Plan for Heatherton (Stabling Facility), to the satisfaction of the Minister for Planning. In addition to being prepared in accordance with LUP4(3) the plan must also: a) Identify alternate land to be included in the Chain of Parks concept and set out a process for the acquisition of the replacement land; and b) be prepared in consultation with the Kingston City Council and DELWP. 5. Implement mitigation measures set out in the Public Open Space Management Plans unless otherwise agreed with the landowner of the relevant public open space.			
LUP5	**Prepare a guide for planning permit applications under the SCO15 Suburban Rail Loop East Infrastructure Protection Incorporated Document** 1. Develop a guide for planning permit applications under the SCO15 Suburban Rail Loop East Infrastructure Protection Incorporated Document that: a) Explains the purposes of the control, building on the work already found in the SRL East – Infrastructure Protection Report. b) Provides guidance on what information is required for specific applications and where detailed information can be obtained on matters such as load factors, tunnel depth etc. c) Provides examples of development and works that are exempt from the requirement for a permit (for locations outside Area A) and examples of where a permit will be required. d) Provides contact information for the referral authority to assist in the application process.	All	Design	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	e) Includes guidance about standard permit conditions that might be applied to specific applications.			
Landscape and visual				
LV1	**Designs to be in accordance with the Urban Design Strategy** 1. Develop and implement UDLPs for permanent above-ground works in accordance with the Incorporated Document. The design responses must be in accordance with the UDS and, to the extent practicable: a) Maximise opportunities for enhancement of and creation of new public and private receptors including public amenity, streets, open space and facilities, and heritage places that are affected in relation to functionality and/or amenity as a result of permanent above ground works. b) Identify areas of potential high visual impact and provide appropriate and high quality visual mitigation together with physical mitigation and landscape integration (where appropriate). c) Ensure sufficient soil coverage above underground infrastructure in locations where the Urban Design and Landscape Plans require trees and other design elements that require soil coverage. d) Minimise overshadowing and wind impacts on existing and future public spaces.	All	Design	Contractors
LV2	**Plant trees early to re-establish amenity** 1. Achieve visual amenity and environmental outcomes as part of any new public realm and open space areas to assist with early establishment of station precinct amenity by: a) Planting shrubs and understory vegetation b) Planting appropriate trees in accordance with AR4 and the UDS 2. NOTE: All advanced and semi-advanced tree stock is to be in accordance with AS2303-2018 Tree Stock for Landscape Use. 3. Take into account future garden bed design in the locations for trees, including consideration of water sensitive urban design such as passive irrigation	All stations	Construction	Contractors
LV3	**Minimising operational lighting impacts** 1. Design and install Project lighting for permanent structures in accordance with relevant standards, including but not limited to Australian Standard 4282 – Control of the obtrusive effects of outdoor	All	Design Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	lighting (AS 4282 – 2019) and the relevant ecology requirements in EC1 and EC4.			
LV4	**Minimising construction lighting impacts** 1. Develop and implement measures to minimise the impact of light spill during construction to sensitive off-site receptors including residential dwellings, open space, and community facilities in accordance with AS4282 – Control of the obtrusive effects of outdoor lighting (AS4282-1997).	All	Construction	Contractors
LV5	**Minimise visual impacts during construction** 1. Design and carry out temporary and construction works in accordance with the guidance in the UDS to help manage construction impacts. Areas disturbed by temporary and construction works are to be reinstated in consultation with the relevant land manager. 2. Develop and implement measures to use temporary landscaping, features or structures during construction to minimise adverse visual impact of Project works and provide visual appeal. Temporary landscape treatments, features or screening must be reused across the Project, where appropriate. 3. Implement landscaping enhancement (with reference to AR4, LV2 and as part of permanent works) prior to construction works commencing, where practicable.	All	Construction	Contractors
LV6	**Minimise visual impacts from changed interface with residential dwellings** 1. Minimise the impacts to adjacent properties where the adjoining land-use changes from residential to public or a Project- related use which results in changed views, visual privacy and screening. 2. Design and implement boundary treatments with consideration of the change from a private to a public interface at the following locations: a) SRL station at Clayton shared northern boundary b) Emergency Support Facility northern boundary c) SRL station at Glen Waverley – west of Myrtle Street realignment d) SRL station at Box Hill pedestrian spine north of Whitehorse Road e) SRL station at Monash – interface with Monash University. f) SRL station at Burwood – McComas Grove and Sinnott Street.	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
LV7	**Enhance visual screening for the Stabling Facility** 1. Retain and seek to enhance screening provided by existing mounds and plantings along the site boundaries to mitigate visual impacts to adjacent linear reserves, open space and residential dwellings through construction and operation of the Stabling Facility. If the existing mounds and screening require removal to facilitate the final design, visual screen would be reinstated to the extent practicable with reference to the landscape buffer as outlined in the UDS. 2. Consider the inclusion of green roof structures for discrete elements of the site and infrastructure.	Stabling Facility	Design Construction Operation	Contractors
Noise (airborne and ground borne) and vibration				
NV1A	**Process Statements** 1. Apply EPRs NV1-NV18 to any sensitive receiver except where a Process Statement: a) Already exists with the owner or occupier of land on which sensitive receivers are located, in which case the terms of the Process Statement prevail, or b) has been prepared in accordance with this paragraph (b), after the Minister for Planning's approval of this EMF, in which case the terms of the Process Statement prevail. A written statement justifying the unique and specific circumstances requiring the Process Statement must be prepared by SRLA and verified by the IEA. The written statement must include an explanation of the type of sensitive receiver or receivers and its use, and the special circumstances that justifies the need for a Process Statement and be co-signed by the owner or occupier of the land on which the sensitive receiver is located. It must also demonstrate that the levels or targets proposed are no less stringent than the reference levels (including any table notes) in NV1-16. 2. NOTE: For the purposes of this EPR, a "Process Statement" means an agreement between SRLA and the owner and occupier of land on which a sensitive receiver or receivers with unique and specific requirements that necessitate a more tailored approach to address specific noise and vibration requirements is located. This may include but not be limited to sensitive research, medical or recording equipment/spaces and performance spaces.	All	Design Construction Operation	SRLA Contractors
NV1	**Minimise noise and vibration impacts to sensitive receivers during construction** 1. Manage and minimise so far as reasonably practicable construction noise and vibration impacts to sensitive receivers at all times consistent with EPA Victoria publications *Civil Construction, Building and Demolition Guide* (EPA Publication 1834 (2020), *Construction – guide to preventing harm to people and the environment* (EPA Publication 1820.1) (as amended or replaced from time to time), and	All	Construction	Contractors

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>
in accordance with the SRLA Residential Support Guidelines, SRLA Business Support Guidelines and as specified in the Construction Noise and Vibration Management Plan (CNVMP).

2. Prescribe reference levels in the CNVMP that represent levels at which harm to human health and the environment is more likely to occur, and which comply with NV1(3) and (4). Where an EPR prescribes a noise reference level that is more rigorous than those set out in NV1(3) and (4), the more rigorous level applies.

Reference levels are not compliance levels that if met will discharge the requirements of the general environmental duty. At all times however, the contractor must first eliminate risks of harm so far as reasonably practicable, then reduce risks of harm so far as reasonably practicable. If exceedance of reference levels occurs after all reasonably practicable measures have been implemented, implement further management actions in accordance with the EPRs, CNVMP and the SRLA Residential Support Guidelines (as appropriate).

3. Do not prescribe airborne noise reference levels in the CNVMP, as required by NV3, that are less stringent than those set out below.

<table>
<tr><th>Time period</th><th>Applicable hours</th><th>Reference levels $L_{Aeq,\ 15\ mins}$</th></tr>
<tr><td>Normal working hours</td><td>7am to 6pm Monday to Friday;
7am to 1pm Saturday</td><td>Pre-existing background noise (L_{A90}) plus 10dB.</td></tr>
<tr><td>Weekend/ evening work</td><td>6pm to 10pm Monday to Friday;
1pm to 10pm Saturday;
7am to 10pm Sunday and public holidays</td><td>For the first 18 months after the commencement of continuous project works at a location.
• Pre-existing background noise level (L_{A90}) plus 10 dB

After 18 months from the commencement of continuous project works at a location:
• Pre-existing background noise level (L_{A90}) plus 5 dB</td></tr>
<tr><td>Night</td><td>10pm to 7am Monday to Sunday</td><td>Noise inaudible within a habitable room of any residential premises.</td></tr>
</table>
4. NOTES:
a) Base all construction noise reference levels on background for those time periods that represent the background at the time of impact.
</td><td></td><td></td><td></td></tr>
</table>

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	b) For the purposes of predictive assessment of night time construction noise, the risk assessment regarding scheduling of works may be informed by using a reference level set to the pre-existing background noise level + 0 dB at the time of impact. c) When assessing predicted or measured construction noise levels against the reference levels, adjustments should be made to the measured level to account for any noise character, including tonal noise and impulsive noise. Reference should be made to section 3.2.5 of EPA Victoria Publication 1997 *Technical guide: measuring and analysing industry noise and music noise* for the purposes of determining appropriate character adjustments. 5. Do not prescribe vibration reference levels that are less rigorous than those recommended by British Standard BS6472-1:2008 in the CNVMP as required by NV3.			
NV2	**Minimise out of hours construction works and their impacts** 1. Schedule works during Normal Working Hours between the hours of 7 am - 6 pm Monday to Friday, and 7 am – 1 pm Saturdays, unless the works meet the following requirements: a) Construction noise levels are predicted to comply with the noise requirements (specified in Table 4.3 of the *Civil construction, building and demolition guide* (EPA Publication 1834)[3] and are undertaken in accordance with management measures set out in the CNVMP developed under NV3; or b) Construction vibration levels are predicted to comply with the relevant night period vibration reference level specified in BS6472-1:2008 (NV6) and are undertaken in accordance with management measures set out in the CNVMP developed under NV3; or c) The works are verified by the Independent Environmental Auditor (IEA) to be Unavoidable Works or Managed-Impact Works as outlined in the *Civil construction, building and demolition guide* (EPA Publication 1834), and noise and vibration emissions (and their impacts) are managed so far as reasonably practicable. 2. Ensure that during Weekend / Evening periods as defined in EPA Publication 1834, noise levels from Managed-Impact Works ($L_{Aeq,15min}$) do not exceed a reference level set to the pre-existing background (L_{A90}) noise level at the time of impact by more than 10 dB for up to 18 months after the works commence at that location and by more than 5 dB after 18 months, unless offers are made to affected sensitive land uses to avoid the impacts of the exceedance. 3. Allow Managed Impact Works to be conducted during Night periods as defined in EPA Publication 1834, providing noise (including vibration) and its impacts are effectively managed to ensure that:	All	Construction	Contractors

[3] The background levels for Weekend/Evening or Night periods are to represent the background at the time of impact

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	a) the noise does not have intrusive characteristics such as impulsiveness, tonality, intermittency or high energy in the low frequency range b) the construction noise level ($L_{Aeq,15min}$) is not predicted or measured to exceed a reference level set to the pre-existing background (L_{A90}) noise level at the time of impact unless offers are made to the affected sensitive land uses to avoid the impacts of the exceedance 4. Verify that proposed works outside of Normal Working Hours meet the definitions of Unavoidable or Managed Impact Works outlined in EPA Publication 1834 for each instance they are undertaken, and that adequate management measures are in place to manage potential impacts. The IEA must verify and the IEA's verification of management measures should consider prediction and modelling carried out under NV11 and community expectation and history of complaints. 5. Notify landowners of any works outside of Normal Working Hours and make available all notifications on the Project website where the Weekend/Evening or Night reference levels specified in EPA Publication 1834 are predicted to be exceeded. 6. Monitor noise and vibration at the commencement of and during relevant works to confirm predicted levels and that appropriate management measures are implemented in accordance with the CNVMP developed under NV3 as verified by the IEA. 7. Satisfy the IEA that any Managed-Impact works are expected to have a net benefit to the amenity of the affected community. The IEA must consider the following when determining the net amenity benefit of proposed Managed-Impact Works, as outlined in the CNVMP as required by NV3: a) the degree of and duration of disturbance from the work b) whether measures have been put in place to avoid noise with intrusive characteristics at noise-sensitive land uses, including but not limited to impulsive noise, tonal noise, intermittent noise, and noise with high energy in the low frequency range c) whether measures to avoid the impacts (respite or alternative accommodation) relating to exceedance of the reference levels set in this EPR for Managed Impact Works have been offered to occupants of sensitive uses where these reference levels are predicted or measured to be exceeded during the proposed Managed Impact works d) whether the proposed management measures are consistent with the requirements of the SRLA *Residential Support Guidelines* e) the need for the works and the approach to managing the impact of the proposed works			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	f) community expectations and history of complaints about noise from Managed-Impact Works g) whether undertaking the works outside of Normal Working Hours materially reduces the duration and/or impact of the works, and if so whether this provides a benefit to the affected community h) cumulative impacts of construction noise and noise from other major construction sites impacting the same sensitive receivers (including works occurring in recent past or programmed sites for near future) 8. Develop a process for emergency works as the above requirements do not apply to emergency works to avoid the loss of life, damage to property, or to prevent environmental harm. The CNVMP must set out a process for responding to emergency works and informing EPA and relevant regulators about these works.			
NV3	**Develop and implement a Construction Noise and Vibration Management Plan (CNVMP)** 1. Prepare, implement and maintain a Construction Noise and Vibration Management Plan (CNVMP) that minimises noise and vibration impacts so far as reasonably practicable in accordance with the EPRs. The CNVMP must be reviewed (including consultation with external stakeholders as required) and updated as appropriate at least every six months. The Independent Environmental Auditor must provide written verification that the review of the original CNVMP and each subsequent review of the CNVMP meets the requirements of the Noise and Vibration EPRs. 2. **Modelling**: Use modelling results to develop the CNVMP. The CNVMP must be informed by noise and vibration modelling of the intended construction locations, durations of works, construction techniques, and preliminary tests undertaken to validate the model. The modelling should be updated at least every six months or when a phase of work changes and predictions remodelled as necessary to confirm the mitigation and remediation measures. 3. **Contents of CNVMP**: Ensure the CNVMP complies with and addresses the Noise (airborne and ground-borne noise) and Vibration EPRs, is informed by noise and vibration modelling described above, and includes (but is not limited to): a) Construction noise and vibration criteria and reference levels as set out in NV1, NV4 to NV10 and NV15 b) Measures to manage and monitor potential vibration impacts on heritage places during construction where required, as set out in HH4 c) Details of construction activities and an indicative schedule for construction works, including the identification of key noise and/or vibration generating construction activities that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers.	All	Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	d) A clear rationale for Unavoidable Works and Managed Impact Works that are planned to be undertaken, and response strategies with mitigation measures to reduce the impacts of these works, so far as reasonably practicable and consistent with EPA publications *Civil construction, building and demolition guide* (EPA Publication 1834) and *Construction – Guide to preventing harm to people and the environment* (EPA Publication 1820.1) (as amended or replaced from time to time), the reference level for Managed Impact Works set in NV2 and the SRLA Residential Support Guidelines. These measures would inform the specific Out of Hours CNVMP. e) How the impacts and risks of harm to human health and the environment from construction noise and vibration will be minimised, including but not limited to: i. where noise and vibration modelling of the intended construction methods and techniques demonstrates a potential exceedance of reference levels ii. where noise and vibration from Project works (including Initial Works if occurring at the same time) and from other developments occurring during construction could, based on noise and vibration modelling, exceed reference levels. iii. Where the environmental values for ambient sound defined in the ERS are at risk. f) Management actions, notification requirements and mitigation measures that will be implemented to reduce noise and vibration impacts so far as reasonably practicable, including (but not limited to) consideration of the following where reasonably practicable: i. Best practice construction technologies to minimise impacts ii. Scheduling works during less sensitive periods iii. Enclosures iv. Adaptive measures to provide periods of respite including scheduling noise intensive works at residential land uses after 9am, introducing one hour breaks from noise intensive works after three hours duration and alternating locations of noise intensive works to provide respite to sensitive receivers over the course of a day v. Measures to reduce noise impacts associated with truck haulage vi. Measures to avoid, minimise or mitigate noise and vibration associated with the use of hydraulic hammers vii. Site hoarding			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	viii. Temporary structures to attenuate noise impacts ix. Measures to manage night works, including avoiding truck movements by storing spoil on-site at night and the use of non-tonal reversing alarms during night works x. Selecting the quietest available equipment/process for the job g) Roles and responsibilities of persons in control of or managing the site with respect to monitoring, reporting and follow up actions to be taken if not compliant with noise criteria and construction noise and vibration reference levels h) Any processes and measures to be implemented as part of the Communications and Stakeholder Engagement Plan (CSEP) including managing matters of interest raised by key stakeholders through CSMP processes, and measures concerning complaints management (see SC2). i) Detail of the complaints management system for noise and vibration complaints, consistent with the requirements under EMF4. 4. **Out of Hours Works CNVMP** a) Prepare and implement a specific CNVMP for all Unavoidable Works (excluding emergency works as described in NV2) or Managed-Impact Works considering the specific requirements of the relevant locations and sensitive receptors. b) Ensure the Out of Hours Works CNVMP is consistent with the requirements of EPA Publication 1834 and SRLA *Residential Support Guidelines,* and verified by the IEA. 5. **Monitoring protocols** a) Ensure the CNVMP identifies noise and vibration-sensitive receivers in the vicinity of the Project alignment, including identification of high-risk locations where modelled noise and/or vibration levels are predicted to present a risk of exceedance of the reference levels and where the environmental values for ambient sound of the ERS may be at risk for: i. a period of at least twelve months for Normal Working Hours; or ii. a period of at least three months for Out of Hours Works; or iii. a period of at least two months for sensitive equipment.			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	b) Develop and implement monitoring protocols that are documented in the CNVMP to establish baseline conditions. c) Develop and implement measures to ensure effective monitoring of noise and vibration associated with construction (see NV1 and NV4 to NV10, NV15) including: i. Monitoring procedures to validate construction predictions on a minimum monthly basis for works predicted to exceed construction noise and vibration criteria and reference levels set out in NV1, NV4 to NV10 and NV15 ii. Attended and/or unattended monitoring procedures to respond to complaints. iii. Prompt response to complaints iv. Prompt implementation of management actions, notification requirements and mitigation measures in response to complaints d) Develop and implement a monitoring program for the duration of noise and vibration generating works at representative and high risk locations and a requirement for automated alerts of exceedance of reference levels to personnel with control over construction activities in areas identified to be high risk in the CNVMP. In accordance with the requirements of the approved EMF, the monitoring program will include a 12 month trial to make publicly available on a project website real time airborne noise monitoring results from high risk locations (with an explanation of the limitations of unverified data). e) Following the 12 month trial period, provide relevant information to enable the IEA to verify the utility to the affected community of making the real time airborne noise monitoring data publicly available. If the trial is extended, provide relevant information to the IEA to enable annual verification by the IEA of the utility to the affected community of making the real time airborne noise monitoring data publicly available.			

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td>NV4</td><td>Minimise construction airborne and ground-borne noise impacts at non-residential noise sensitive receivers
1. Develop and implement management actions for non-residential noise sensitive areas (based on AS/NZS 2107:2016 and the NSW Interim Construction Noise Guideline 2009) in accordance with the CNVMP (developed under NV3) if construction airborne or ground-borne noise is predicted or measured to exceed the noise reference levels below, and a noise sensitive receiver is expected to be adversely impacted.
2. Determine whether a noise sensitive receiver is, or predicted to be, adversely impacted having regard to:
a) The level of construction noise
b) The duration of construction noise
c) The presence of any intrusive characteristics as part of the construction noise
d) The existing ambient noise levels
e) Consultation with the owner or operator of the noise sensitive receiver
f) The sensitivity of the receiver to airborne noise (e.g. the environmental values for ambient sound defined in the ERS) that need protection from airborne noise
g) Any proposed actions provided for in the CNVMP developed under NV3
h) The necessity of construction activities where the levels in the table below are exceeded.
<table><tr><th>Land use</th><th>Construction noise management level, $L_{Aeq,15min}$ (applies when properties are in use)</th></tr><tr><td>Classrooms in schools and other education centres including kindergartens</td><td>Internal noise level 45 dB</td></tr><tr><td>Places of worship</td><td>Internal noise level 45 dB</td></tr><tr><td>Active recreation areas characterised by sporting activities and activities which generate their own noise, making them less sensitive to external noise intrusion</td><td>External noise level 65 dB (free-field)</td></tr><tr><td>Passive recreation areas characterised by contemplative activities that generate little noise and where benefits are compromised by external noise intrusion, for example reading, meditation</td><td>External noise level 60 dB (free-field)</td></tr></table></td><td>All</td><td>Construction</td><td>Contractors</td></tr>
</table>

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>
<table>
<tr><td>Community centres</td><td>Depends on the intended use of the centre. Refer to the recommended maximum internal noise levels in AS/NZS 2107:2016</td></tr>
<tr><td>Performing arts facilities and studios</td><td>Depends on the intended use of the facility or studio. Refer to the recommended maximum internal noise levels in AS/NZS 2107:2016</td></tr>
<tr><td>Industrial premises</td><td>External noise level 75 dB (free-field)</td></tr>
<tr><td>Offices, retail outlets</td><td>External noise level 70 dB (free-field)</td></tr>
<tr><td>CSIRO anechoic and reverberation chambers</td><td>Internal noise level 5 dB above the internal ambient noise level in any octave band from 63 Hz to 4 kHz</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>NV5</td><td>Establish guidelines to protect utility assets
1. For construction: Develop and implement management actions if the relevant reference level, as determined under the hierarchy of methods set out in paragraphs (a), (b) or (c) and verified by the IEA, is predicted or measured to be exceeded.
a) The vibration level substantiated in writing by the asset owner to maintain utility asset integrity and which is accepted by the contractor(s);
b) If the vibration level in 1(a) cannot be substantiated by the asset owner or is not accepted by the contractor(s) (acting reasonably), the vibration level substantiated in writing by the contractor(s) in consultation with the asset owner based on an assessment of the condition of the asset;
c) If the contractor(s) is unable to substantiate a vibration level on the basis of its assessment of the condition of the asset in consultation with the asset owner in NV5(1)(b), and the IEA has verified that (a) and (b) have been completed, the reference levels for buried pipework/underground infrastructure set out in Table 3 of the German Standard DIN 4150-3:2016 (Table 3 reproduced below) will apply.
<table>
<tr><th>Pipe material</th><th>Reference Peak Component Particle Velocity, vi,max (mm/s) measured on the pipe</th></tr>
<tr><td>Steel (including welded pipes)</td><td>100</td></tr>
<tr><td>Clay, concrete, reinforced concrete, pre stressed concrete, metal (with or without flange)</td><td>80</td></tr>
</table>
</td><td>All</td><td>Design
Construction
Operation</td><td>Contractors</td></tr>
</table>

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	<table><tr><td>Masonry, plastic</td><td>50</td></tr></table> 2. **For operation**: Design and implement mitigation measures to reduce vibration levels to the relevant reference levels, so far as reasonably practicable. Reference levels must be determined by applying the hierarchy of methods set out in NV(1)(a), (b) and (c). 3. NOTES: a) The reference levels in the Table must be reduced by 50% when evaluating the effects of long-term vibration on buried pipework. Long-term vibration relates to events that may result in fatigue of materials or a significant resonant structural response (refer to DIN4150 for guidance on what is considered short-term and long-term). b) It is assumed pipes have been manufactured and laid using contemporary methods and technology. Where consultation with the asset owner reveals that this is not the case, alternative reference levels will be established under either NV5(1)(b) or (1)(c) for construction and operation. c) Consultation is required with the relevant asset owner if blasting is proposed within 60 m of one of their assets. d) Representative monitoring of vibration levels during construction is to be undertaken to demonstrate compliance with the relevant reference level. e) The reference levels are to be established as set out in NV5(1)(a), (b) and (c) for construction and operation and should be sought to be achieved through the application of reasonably practicable mitigation measures. If exceedance occurs, the risk of harm or damage to the utility asset must be investigated; and where this risk is confirmed, additional mitigation measures would be required in consultation with the utility asset owner. f) Where necessary, rectify any defects that are attributable to the Project. g) Where a standard, guideline or asset owner's procedures are applied, the measurement locations must reflect those stipulated in the relevant document from which the vibration criteria are adopted.			
NV6	**Minimise construction vibration impacts on amenity** 1. Develop and implement management actions if the following reference levels for vibration from construction activity to protect human comfort of occupied buildings (including heritage buildings) are predicted or measured to be exceeded (levels are calculated from the British Standard BS6472-	All	Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation

1:2008).

	Reference levels – Vibration Dose Values (m/s1.75)			
	Day (7 am to 10 pm)		Night (10 pm to 7 am)	
Type of space occupancy	Preferred value	Maximum value	Preferred value	Maximum value
Residential	0.2	0.4	0.1	0.2
Offices, schools, education centres, places of worship	0.4	0.8	0.4	0.8
Workshops	0.8	1.6	0.8	1.6

2. Notes:

a) Whilst the levels in the table are from the British Standard the day time and night-time duration has been amended to align with the EPA Publication 1834.

b) For the purposes of undertaking measurements, modelling and further assessment of construction impacts, which are generally undertaken in the velocity metric (mm/s), these VDVs have been converted to an equivalent PPV based upon a number of generic assumptions outlined in the SRL East Impact Assessment – Vibration and Ground-borne Noise].

c) Where it can be shown that other PPVs are appropriate, and these are verified by the IEA, these can be applied.

Location	Reference levels – Peak Particle Velocity (mm/s)			
	Day – 7 am to 10 pm		Night – 10 pm – 7 am	
	Preferred value	Maximum value	Preferred value	Maximum value
Residential	0.75	1.5	0.5	0.75
Offices, schools, education centres, places of worship	1.5	3.0	1.5	3.0
Workshops	3.0	5.0	3.0	5.0

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>3. Notes:
a) The reference levels are non-mandatory; they are goals that should be sought to be achieved through the application of practicable mitigation measures. If exceeded then management actions will be required.
b) The Preferred Value is the vibration level or dose at which there is a low probability of adverse comment or disturbance to building occupants. Contractors should design activities to not exceed the preferred values so far as reasonably practicable and where an area is not already exposed to vibration. Where all feasible and reasonable measures have been applied, values up to or beyond the Maximum Value may be used if they can be justified in accordance with the CNVMP as required by NV3.
c) Measurement locations must be consistent with section 5.2.3 of British Standard BS6472-1:2008.
d) Either the reference VDV or the PPV values may be applied in the assessment.</td><td></td><td></td><td></td></tr>
<tr><td>NV7</td><td>Minimise construction and operational vibration impacts to structures
1. For Construction: Develop and implement management actions if the construction vibration reference levels for short-term vibration effects on structures presented in the table below (which adopts levels from the German Standard DIN 4150-3:2016) are predicted or measured to not be achieved.
2. For Operation: Design and implement practicable mitigation measures to reduce vibration levels to the relevant reference level so far as reasonably practicable for short-term vibration effects on structures presented in the table below (which adopts levels from the German Standard DIN 4150-3:2016).
<table>
<tr><th rowspan="3">Type of structure</th><th colspan="5">Reference levels for Peak Component Particle Velocity, vi,max (mm/s)</th></tr>
<tr><th colspan="3">Short-term vibration at the foundation at a frequency of:</th><th>Vibration at horizontal place of highest floor</th><th>Floor slabs, vertical direction</th></tr>
<tr><th>1 to 10 Hz</th><th>10 to 50 Hz</th><th>50 to 100 Hz*</th><th>All frequencies</th><th>All frequencies</th></tr>
<tr><td>Buildings used for commercial purposes, industrial buildings and</td><td>20</td><td>20 to 40</td><td>40 to 50</td><td>40</td><td>20</td></tr>
</table></td><td>All</td><td>Design
Construction
Operation</td><td>Contractors</td></tr>
</table>

Number	Environmental Performance Requirement	Project component	Timing	Implementation

buildings of similar design					
Residential buildings and buildings of similar design and/or occupancy	5	5 to 15	15 to 20	15	20
Structures that, because of their particular sensitivity to vibration cannot be classified under lines 1 and 2 and are of intrinsic value (such as heritage buildings)	3	3 to 8	8 to 10	8	20

*At frequencies > 100 Hz, the reference levels in this column may be used as a minimum.

3. Notes:
   a) Vibration levels marginally exceeding the reference levels in the table would not necessarily mean that damage would occur and further investigation would be required to determine if higher vibration levels can be accommodated without risk of damage.
   b) For civil engineering structures (e.g. with reinforced concrete constructions used as abutments or foundation pads)the values for Type 1 buildings may be increased by a factor of 2.
   c) Short-term vibration is defined in German Standard DIN 4150-3:2016 as vibration that does not occur often enough to cause material fatigue and whose development over time and duration will not induce a significant increase in vibration due to resonance in the particular structure.
4. **For Construction:** Implement management actions if the construction vibration reference levels for long-term vibration effects on structures presented in the table below (which adopts levels from the German Standard DIN 4150- 3:2016) are expected not to be achieved or are not achieved.
5. **For Operation:** Design and implement practicable mitigation measures to reduce vibration levels so far as reasonably practicable for long-term vibration effects on structures presented in the table below (which adopts levels from the German Standard DIN 4150-3:2016).

Type of structure	Reference levels for Peak Component Particle Velocity, $v_{i,max}$ (mm/s) Long-term vibration	
	Horizontal plane of highest floor –	Floor slab, vertical

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>
<table>
<tr><th></th><th>All frequencies</th><th>direction – All frequencies</th></tr>
<tr><td>Buildings used for commercial purposes, industrial buildings and buildings of similar design</td><td>10</td><td>10</td></tr>
<tr><td>Residential buildings and buildings of similar design and/or occupancy</td><td>5</td><td>10</td></tr>
<tr><td>Structures that, because of their particular sensitivity to vibration cannot be classified under lines 1 and 2 and are of intrinsic value (such as heritage buildings)</td><td>2.5</td><td>10</td></tr>
</table>
6. Notes:
a) Vibration levels marginally exceeding those in the table would not necessarily mean that damage would occur and further investigation would be required to determine if higher vibration levels can be accommodated without risk of damage.
b) Levels in the above table may need to be adjusted following a pre-construction condition survey.
c) Long-term vibration is any vibration not covered by the definition of “short-term vibration” above and relates to events that may result in fatigue of materials or a significant resonant structural response.
</td><td></td><td></td><td></td></tr>
<tr><td>NV8</td><td>
Minimise construction ground-borne (internal) noise impacts on residential amenity
1. Develop and implement management and contingency actions if:
a) the following ground-borne noise reference levels are predicted or measured to be exceeded during construction; and
b) airborne noise levels are lower than these ground-borne noise levels in the table below (which adopts levels from the NSW Interim Construction Noise Guideline, 2009).
<table>
<tr><th>Time of Day</th><th>Ground-borne noise reference levels
Internal noise level measured at the centre of the most affected habitable room</th></tr>
<tr><td>Evening (6 pm to 10 pm)</td><td>LAeq(15 minute) = 40 dBA</td></tr>
</table>
</td><td>All</td><td>Construction</td><td>Contractors</td></tr>
</table>

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>
<table>
<tr><td>Night (10 pm to 7 am)</td><td>L_{Aeq}(15 minute) = 35 dBA</td></tr>
</table>
2. Include Management actions, such as community consultation and respite offer in accordance with the SRLA Business Support Guidelines and SRLA Residential Support Guidelines.
</td><td></td><td></td><td></td></tr>
<tr><td>NV9</td><td>
Minimise amenity impacts from blast vibration and blast overpressure

Blast vibration – Develop and implement management actions if the following vibration reference levels are predicted or measured to be exceeded. Blasting activities must comply with Australian Standard AS2187.2-2006, Explosives – Storage and use Part 2 – Use of explosives for all blasting.

<table>
<tr><th>Category</th><th>Type of blasting operations</th><th>Reference levels
Peak component particle velocity (mm/s)</th></tr>
<tr><td>Sensitive site</td><td>Operations lasting longer than 12 months or more than 20 blasts</td><td>5mm/s for 95% blasts per year
10 mm/s maximum unless agreement is reached with the occupier that a higher level may apply</td></tr>
<tr><td>Sensitive site</td><td>Operations lasting less than 12 months or less than 20 blasts</td><td>10 mm/s maximum unless agreement is reached with occupier that a higher level may apply</td></tr>
<tr><td>Occupied non-sensitive sites such as factories and commercial premises</td><td>All blasting</td><td>25 mm/s maximum value unless agreement is reached with occupier that a higher level may apply. For sites containing equipment sensitive to vibration, the vibration should be kept below manufacturer’s specification or levels that can be shown to adversely affect the equipment operation</td></tr>
</table>
<ol start="2">
Blast overpressure – Develop and implement management actions if the following overpressure reference levels are predicted or measured to not be achieved. Blasting activities must comply with Australian Standard AS2187.2-2006, Explosives – Storage and use Part 2 – Use of explosives for all blasting.

</td><td>All</td><td>Construction</td><td>Contractors</td></tr>
</table>

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>
<table>
<tr><th>Category</th><th>Type of blasting operations</th><th>Reference level
Peak overpressure value (dBL)</th></tr>
<tr><td>Sensitive Site</td><td>Operations lasting longer than 12 months or more than 20 blasts</td><td>115 dBL for 95% blasts per year. 120 dBL maximum unless agreement with occupier that a higher level may apply</td></tr>
<tr><td>Sensitive site</td><td>Operations lasting less than 12 months or less than 20 blasts</td><td>120 dBL for 95% blasts per year. 125 dBL maximum unless agreement with occupier that a higher level may apply</td></tr>
<tr><td>Occupied non-sensitive sites such as factories and commercial premises</td><td>All blasting</td><td>125 dBL maximum value unless agreement is reached with occupier that a higher level may apply. For sites containing equipment sensitive to vibration, the vibration should be kept below manufacturers specification or levels that can be shown to adversely affect the equipment operation</td></tr>
</table>
3. For the purposes of this EPR:
a) A sensitive site includes houses and low rise residential buildings, theatres, schools, and other similar buildings occupied by people.
b) Reference levels to be established using the manufacturer’s specification or in consultation with the equipment owners (where substantiated with data) for vibration-sensitive equipment.
</td><td></td><td></td><td></td></tr>
<tr><td>NV10</td><td>Minimise impacts on bio-resources and sensitive research
1. Develop and implement practicable mitigation measures and management actions to achieve the following reference levels for all known and committed (as at 5 August 2022) areas housing bio-resources:
a) Background noise should be below 50 dBL1 (internal) and should be free of distinct tones, and
b) Short noise exposure should be less than 85 dBL1 (internal), or
c) Any alternative noise level agreed with the owner of the bio-resources including specific requirements for non-rodent bioresources
2. NOTES:
a) Noise levels are to be predicted, measured and assessed for the specific frequency range the species and type of hearing of the bio-resources potentially affected.
b) Determining an acceptable level for bio-resources potentially affected by construction or operation</td><td>All stations
Tunnels</td><td>Design
Construction
Operation</td><td>Contractors</td></tr>
</table>

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	should also consider the existing background levels they are exposed to during normal activities and regular maintenance of the facility. 3. Limit vibrations for bio-resource facilities to a maximum one-third octave rms level of less than 100 µm/s for general animal holding facilities and less than 50 µm/s for rodent holding and behavioural studies facilities (levels based on the Code of Practice for the Housing and Care of Laboratory Mice and Rats – Department of Primary Industries, Victoria 2004 and the National Institutes of Health Design Requirements Manual, 2008).			
NV11	**Undertake noise and vibration modelling and monitoring** 1. **Construction phase** a) Appoint suitably qualified acoustic and vibration consultants to predict and assess construction noise and vibration to inform the CNVMP and determine the practicable mitigation and management measures necessary to minimise vibration and noise impacts in accordance with NV2 and NV3. 2. **Design phase** a) Appoint suitably qualified acoustic and vibration consultants to predict and assess operational noise and vibration and determine the practicable mitigation measures necessary to achieve the vibration and noise reference levels in NV5, NV7, NV10 and NV12-NV17. b) Predict and assess operational vibration and ground-borne noise consistent with the methods and guidance given in ISO 14837.1:2005 *Mechanical vibration – Ground-borne noise and vibration arising from rails systems – Part 1: General guidance.* Assessments based on modelling must factor in uncertainty in the model methodology, inputs and assumptions. Modelling must demonstrate a 95% certainty of compliance with ground-borne noise and vibration reference levels at design stage for each receiver determined in accordance with ISO/IEC Guide 98-3 Uncertainty of measurement — Part 3:Guide to the expression of uncertainty in measurement. c) Require an Operation Noise and Vibration Report be prepared by suitably qualified acoustic and vibration consultants for review and verification by the IEA. The Operation Noise and Vibration Report must document the predictions and mitigation measures and the compliance of the design with the provisions of these EPRs. 3. **Commissioning / Operation** a) Appoint suitably qualified acoustic and vibration consultants to undertake commissioning noise and vibration measurements to assess levels and compliance with the provisions of these EPRs and to identify and implement contingency measures if the requirements in the EPRs are not	All	Design Construction Operation	Contractors

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>met. This must be documented in a report reviewed and verified by the IEA and a copy of the report must be made available on request.</td><td></td><td></td><td></td></tr>
<tr><td>NV12</td><td>Minimise airborne rail noise levels for operation
1. Avoid, minimise or mitigate rail noise at source, so far as reasonably practicable
2. If the Victorian Passenger Rail Infrastructure Noise Policy (PRINP) (April 2013) Investigation Thresholds, set out in the table below, are predicted or measured to be exceeded during operation after implementation of all reasonably practicable mitigation measures on Project land, including consideration of urban design outcomes, offer at-receiver mitigation in accordance with NV12(4).
<table>
<tr><th>Time</th><th>Type of receiver</th><th>Investigation Thresholds</th></tr>
<tr><td>Day, 6 am to 10 pm</td><td>Residential dwellings and other buildings where people sleep including aged persons homes, hospitals, motels and caravan parks.
Noise sensitive community buildings, including schools, kindergartens, libraries, performing arts facilities.</td><td>60 dB $L_{Aeq,16h}$
and/or
80 dB L_{Amax}</td></tr>
<tr><td>Night, 10 pm to 6 am</td><td>Residential dwellings and other buildings wherepeople sleep including aged persons homes, hospitals, motels and caravan parks.</td><td>55 dB $L_{Aeq,8h}$
and/or
80 dB L_{Amax}</td></tr>
</table>
3. NOTES:
a) Any commissioning measurements conducted under NV11 must be used to calibrate the predicted rail noise levels for when the Project is operating at ultimate configuration and verify that compliance with NV12 is predicted for that ultimate configuration scenario.
b) Noise levels are to be assessed at 1 m from the window of the most exposed habitable facade at a noise-sensitive land use.
c) LAmax is defined as maximum A-weighted sound pressure level and is the 95th percentile of the highest value of the A-weighed sound pressure level reached within the day or night.</td><td>Surface level Mainline track adjacent to Kingston Road, Heatherton</td><td>Design
Operation</td><td>Contractors</td></tr>
</table>

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>4. At-receiver treatment such as upgrades to residential building facades must be offered to affected landowners if the above investigation thresholds are predicted or measured to be exceeded during operation. Such treatments should be designed to meet the following internal noise levels where practicable to do so and subject to landowner consent:

a) Noise levels of trains should not exceed 35 dB $L_{Aeq,16h}$ when measured within living areas and 30 dB $L_{Aeq,8h}$ when measured within bedrooms with windows and doors closed.

b) Maximum noise levels of trains should not exceed 45 dB L_{Amax} when measured within bedrooms with windows and doors closed.

c) Maximum noise level of trains should not exceed 55 dB L_{Amax} when measured within living areas with windows and doors closed.</td><td></td><td></td><td></td></tr>
<tr><td>NV13</td><td>Minimise ground-borne noise impacts for operation

1. Design and implement mitigation measures, so far as reasonably practicable, to achieve the operational ground-borne noise reference levels for known and committed sensitive land uses (as at 5 August 2022) as shown in the table below. The reference levels in the table below are mandatory levels for operation that if exceeded would require implementation of NV18.

<table>
<tr><th>Sensitive land use</th><th>Time of day</th><th>Internal noise reference levels</th></tr>
<tr><td>Residential</td><td>Day
7am – 10pm</td><td>40 dB L_{ASmax} and an increase in existing rail noise level by 3 dB(A) or more</td></tr>
<tr><td></td><td>Night
10pm – 7am</td><td>35 dB L_{ASmax} and an increase in existing rail noise level by 3 dB(A) or more</td></tr>
<tr><td>Schools, education centres, places of worship</td><td>When in use</td><td>40-45 dB L_{ASmax} and an increase in existing rail noise level by 3 dB(A) or more</td></tr>
<tr><td>Hospitals (bed wards and operating theatres)</td><td>24-hours</td><td>L_{ASmax} 35</td></tr>
<tr><td>Offices (including private offices and conference rooms)</td><td>When in use</td><td>L_{ASmax} 40</td></tr>
<tr><td>Retail spaces</td><td>When in use</td><td>L_{ASmax} 50</td></tr>
<tr><td>Cinemas and public halls</td><td>When in use</td><td>L_{ASmax} 30</td></tr>
</table>
</td><td>All</td><td>Design
Operation</td><td>Contractors</td></tr>
</table>

Number	Environmental Performance Requirement			Project component	Timing	Implementation

Drama theatres	When in use	L_{ASmax} 25 or other level derived having regard to Note (g)
Concert halls, television and sound recording studios	When in use	L_{ASmax} 25 or other level derived having regard to Note (g)
Vibration-sensitive equipment	When in use	See Note (i)
Lecture theatres	When in use	L_{ASmax} 35
Other critical spaces	When in use	Refer AS/NZS 2107:2016 having regard to note (j).

2. NOTES:

a) The reference levels in the table above are based on the NSW Rail Infrastructure Noise Guideline, 2013 (RING)

b) The reference levels refer to operational rail noise only and do not include noise from ambient sources

c) Ground-borne noise levels for human amenity measured as L_{ASmax} are only relevant where they are audible and their value exceeds the value of operational rail airborne noise levels L_{ASmax}.

d) Assessment locations are internal and ground-borne noise is to be assessed near to but not at the centre of the most affected noise sensitive room in accordance with ISO 14837-1.

e) L_{ASmax} refers to the maximum noise level not exceeded by 95% of rail pass-by events

f) For schools, education centres and places of worship the lower value of the range is applicable where low internal noise levels are expected

g) The values for performing arts spaces may need to be reassessed to address the specific requirements of a venue. In the absence of specific reference levels for these performing art spaces, the L_{ASmax} operational ground-borne noise level shall be limited to no more than the pre-existing ambient noise level (equivalent continuous noise level, L_{Aeq}) determined for times when the venue is in use (including operation of building services). Any venue-specific reference levels must be substantiated by design and/or test data.

h) The 'residential' category applies to any residential premises and includes long-term residential use such as aged care facilities

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>i) Where vibration-sensitive equipment is demonstrated to be sensitive to ground-borne noise, reference levels are as follows:

i. where no stakeholder developed criteria exists, the equipment manufacturer/supplier ground-borne noise criteria unless existing ambient noise levels are higher than the manufacturer/supplier criteria, in which case the reference levels are the existing ambient noise levels (equivalent continuous noise level, L_{Aeq}) determined for times when the facility is in use; or

ii. stakeholder developed criteria (substantiated by appropriate data and evidence) unless existing ambient noise levels are higher than the stakeholder developed criteria, in which case the reference levels are the existing ambient noise levels (equivalent continuous noise level, L_{Aeq}) determined for times when the facility is in use.

j) For ‘other critical spaces’, the L_{ASmax}, 95% shall be designed to achieve the lower end of the L_{Aeq} design sound level range stipulated in AS/NZS 2107:2016 for the relevant type of occupancy/activity, or the existing ambient noise level L_{Aeq} if it is higher.</td><td></td><td></td><td></td></tr>
<tr><td>NV14</td><td>Minimise vibration impacts for operation

1. Design, prepare and implement mitigation measures, so far as reasonably practicable, for operation to achieve the following ‘preferred’ reference vibration levels (subject to Note 2(c)) when accounting for the cumulative impacts of all operational rail vibration sources. The maximum value is a mandatory level for operation that if exceeded would require implementation of NV18.
<table>
<tr><th rowspan="2">Location</th><th colspan="4">Reference level - VDV (m/s$^{1.75}$)</th></tr>
<tr><th colspan="2">Day
7am to 10pm</th><th colspan="2">Night
10pm to 7am</th></tr>
<tr><th>Preferred Value</th><th>Maximum Value</th><th>Preferred Value</th><th>Maximum Value</th></tr>
<tr><td>Residences</td><td>0.20</td><td>0.40</td><td>0.10</td><td>0.20</td></tr>
<tr><td>Offices, schools, education centres, places of worship</td><td>0.40</td><td>0.80</td><td>0.40</td><td>0.80</td></tr>
<tr><td>Workshops</td><td>0.80</td><td>1.60</td><td>0.80</td><td>1.60</td></tr>
</table></td><td>All</td><td>Design

Operation</td><td>Contractors</td></tr>
</table>

<table>
<tr><th>Number</th><th>Environmental Performance Requirement</th><th>Project component</th><th>Timing</th><th>Implementation</th></tr>
<tr><td></td><td>2. NOTES:

a) The reference levels in the table above are based on BS6472-1:2008

b) Whilst the levels in the table are from the British Standard the day time and night-time duration has been amended to align with the NSW Rail Infrastructure Noise Guideline, 2013 (RING)

c) Where vibration due to existing rail operations exceeds or is at or close to the relevant ‘preferred value’ and it is not reasonably practicable to achieve the ‘preferred value’, implement all mitigation measures, so far as reasonably practicable, to reduce vibration levels.</td><td></td><td></td><td></td></tr>
<tr><td>NV15</td><td>Minimise impacts to vibration-sensitive equipment

1. For Construction: Develop management actions that must be implemented if the relevant reference level from the options listed below for vibration caused by construction works for the Project is expected to be exceeded or is exceeded for known or committed (as at 5 August 2022) vibration-sensitive equipment.

2. For Operation: Design practicable mitigation measures that must be implemented to achieve the relevant reference level determined from the options listed below for vibration caused by operation of the Project at known or committed (as at 5 August 2022) vibration-sensitive equipment:

a) Stakeholder-developed criteria (substantiated by appropriate data and evidence) unless existing vibration levels are higher than the stakeholder developed criteria, in which case the reference levels are the existing vibration levels; or

b) Where no stakeholder developed criteria exists, the equipment manufacturer/supplier vibration criteria unless existing vibration levels are higher than the manufacturer/supplier criteria, in which case the reference levels are the existing vibration levels; or

c) If NV15(a) and (b) do not apply, the relevant American Society of Heating Refrigerating and Air-conditioning Engineers (ASHRAE) equipment vibration reference curve described in the Table below.

<table><tr><th>Equipment requirements</th><th>Reference curve</th></tr><tr><td>Bench microscopes up to 100x magnification; laboratory robots.</td><td>Operating room</td></tr><tr><td>Bench microscopes up to 400x magnification; optical and other precision balances; coordinate measuring machines; metrology laboratories; optical comparators; microelectronics manufacturing equipment; proximity and</td><td>VC-A</td></tr></table></td><td>All stations

Tunnels</td><td>Design

Construction

Operation</td><td>Contractors</td></tr>
</table>

Number	Environmental Performance Requirement		Project component	Timing	Implementation
	projection aligners, etc.				
	Microsurgery, eye surgery, neurosurgery; bench microscopes at magnification greater than 400x; optical equipment on isolation tables; micro electronic manufacturing equipment such as inspection and lithology equipment (including steppers) to 3 µm line widths.	VC-B			
	Electron microscopes up to 30,000x magnification; microtomes; magnetic resonance images; microelectronics manufacturing equipment such as lithography and inspection equipment to 1 µm detail size.	VC-C			
	Electron microscopes at magnification greater than 30,000x; mass spectrometers; cell implant equipment; microelectronics manufacturing equipment such as aligners, steppers and other critical equipment for photolithography with line widths of ½ µm; includes electron beam systems.	VC-D			
	Un-isolated laser and optical research systems; microelectronics manufacturing equipment such as aligners, steppers and other critical equipment for photolithography with line widths of ¼ µm; includes electron beam systems.	VC-E			
NV16	**Minimise noise from the Stabling Facility, SRL stations and fixed plant** 1. Design, construct and operate the Stabling Facility, SRL stations and relevant fixed infrastructure that is subject to Part 5.3, Division 3 (Unreasonable and aggravated noise from commercial, industrial and trade premises) of the *Environment Protection Regulations 2021* to: • minimise the risk of harm from noise associated with the Project so far as reasonably practicable, • prevent unreasonable noise by ensuring the risk of sporadic noise and low frequency noise is eliminated or managed, and • ensure that noise levels do not exceed the noise limits set by the *Environment Protection Regulations 2021* 2. Apply this EPR to noise from the substations at Burwood, Monash and the Stabling Facility when operating during the construction period. 3. Conduct noise monitoring, predictions and analysis for the purposes of this EPR in accordance with the Noise Protocol (EPA Publication 1826.4), *Measuring and analysing industry noise and music noise* (Technical Guide: EPA Publication 1997) and, where relevant, the *Noise guideline – assessing low frequency noise* (EPA Publication 1996).		All stations Stabling Facility Emergency Support Facility SRL substations	Design Construction Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	4. Design and implement practicable measures for the Stabling Facility and relevant fixed infrastructure (for noise sensitive receivers where Part 5, Division 3 of the Environment Protection Regulations 2021 does not apply) to comply with the internal lower Recommended Design Sound Levels as defined in AS/NZS 2107:2016 or the existing internal background noise level, whichever is the higher, for the following areas: a) Teaching spaces b) Laboratories c) Conference rooms d) Libraries e) Music studios f) Operating theatres / surgeries g) Wards h) Performance spaces / galleries i) Places of worship. 5. NOTE: This EPR applies to train movements within the Stabling Facility boundary only and does not apply to noise generated by trains operating on the passenger rail infrastructure (NV12 applies to noise on the passenger rail infrastructure).			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
NV17	**Assess cumulative noise levels from the Stabling Facility** 1. Predict and assess the cumulative noise from the Stabling facility (considering all noise sources subject to NV16) and train movements on the main line (considering all noise sources subject to NV12) as an outdoor $L_{Aeq\ 16h}$ for the daytime (6am-10pm) and $L_{Aeq\ 8h}$ for the night (10pm-6am). 2. Compare the predicted cumulative L_{Aeq16h} and $L_{Aeq\ 8\ h}$ to the Cumulative Reference Level [being the higher of the existing corresponding ambient level ($L_{Aeq\ 16h}$ and $L_{Aeq\ 8h}$ respectively) or the ERS Category 3 objective level]. 3. Where the predicted cumulative noise level exceeds the Cumulative Reference Level at a noise sensitive area (as defined by the *Environment Protection Regulations 2021*), investigate mitigation measures to the Stabling Facility to further reduce the predicted cumulative noise level, so far as reasonably practicable. The investigation should be verified by the IEA. 4. Implement mitigation measures at the Stabling Facility that have been verified by the IEA in accordance with NV17(3), to reduce the predicated cumulative noise level to the Cumulative Reference Level, so far as reasonably practicable. 5. If, after all verified reasonably practicable measures to reduce the Stabling Facility's contribution have been applied in accordance with NV17(4) and the predicted cumulative noise level remains above the Cumulative Reference Level, offer at receiver mitigation to the owner of the noise sensitive area (as defined by the Environment Protection Regulations 2021) in accordance with NV12(4).	Stabling Facility Surface level Mainline track adjacent to Kingston Road, Heatherton	Design Operation	Contractors
NV18	**Non-compliance of operational ground borne noise and vibration** 1. Develop and implement the following management actions if measured operational ground-borne noise and/or vibration exceeds the mandatory levels for operation in NV13 or NV14: a) Engage with the affected party to understand the nature of the exceedance having regard to the existing environment, the level of exceedance and how often the exceedance is occurring. b) Investigate, assess and quantify the exceedance and the risk of harm to human health. The investigation, assessment and quantification must be verified by the IEA. c) If the investigation and assessment under paragraph (b) identifies a potential risk of harm to human health, implement all reasonably practicable at-source mitigation measures to avoid or further reduce the risk of harm to human health d) If it is not reasonably practicable to avoid or reduce the risk of harm to human health at-source, offer compensation which may include voluntary purchase of a residential property undertaken in accordance with the Voluntary Residential Property Purchase Scheme required by SC7.	All	Operation	SRLA Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
Social and community				
SC1	**Develop a Communication and Stakeholder Engagement Management Framework** 1. Develop a Communication and Stakeholder Engagement Management Framework (CSEMF) to govern the stakeholder engagement plans developed for all Project components as required by SC2. The framework must be consistent with IAP2 principles and guide the elements to be included in each engagement plan. The elements must include: a) Engagement principles and goals b) Governance c) Project stakeholders, including but not limited to communities, universities, and businesses d) Engagement approach including: i. Phases and objectives ii. Tools and techniques iii. Approaches for different project stakeholders iv. Precinct reference groups for each of the six stations for the design and construction phases v. An outline of the purpose of engagement for different stakeholders. e) Complaints management approach f) Responsiveness to complaints approach g) Issues management approach h) Communication and engagement roles and responsibilities i) Engagement guidelines and references j) Review and evaluation approach	All	Design Construction	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	k) Measures to ensure the engagement plans allow for effective communication with Culturally and Linguistically Diverse communities, including allocation of appropriate persons to undertake interaction with these communities			
SC2	**Develop and implement Communications and Stakeholder Engagement Plans to manage interactions with the community** 1. Develop and implement individual communications and stakeholder engagement plans for each of the Project components that comply with the CSEMF (SC1) to address construction activities and how engagement will be undertaken with the community. 2. Ensure public-facing documents developed in accordance with any Community and Stakeholder Engagement Plans are a) are written in plain English; and b) include contacts for interpreter services; and c) specific for each Station, the Stabling Facility and works area, as required. 3. Ensure these plans provide a consolidated location of information about the relevant EPRs and guidelines for each station and work area.	All	Design Construction	Contractors
SC3	**Minimise impacts on public open space and recreational infrastructure** 1. Implement the measures set out in the Public Open Space Management Plans developed to comply with the Public Open Space Framework – Rail and Infrastructure (LUP4). The Public Open Space Management Plans must consider as a minimum: a) Management of construction impacts on the users of public open space where these occur. b) Allowance for the continuity of use of active public open space facilities by sports clubs and other formal users at facilities equivalent to impacted facilities. c) Relocation of existing or provision of alternative infrastructure such as children's playgrounds, running tracks, skateparks and basketball courts, barbeques and associated furniture on, or in the closest proximity to, the existing sites prior to works commencing, including the need to maintain access for existing user groups. d) If SC31c) cannot be met, provide access to alternative recreational infrastructure and public open space within a 1.6 kilometre radius prior to the loss of the original facilities, unless otherwise specified in the Public Open Space Framework.	SRL station at Cheltenham Stabling Facility SRL station at Clayton SRL station at Burwood SRL station at Box Hill Stabling Facility	Design Construction	SRLA Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	e) Locate alternative facilities within the same catchment of the displaced facilities unless otherwise agreed with the facility owner and informed by consultation with affected user groups, and local councils.			
SC4	**Minimise disruption to public and private events** 1. Work with relevant local councils, the universities and other key stakeholders to plan for and coordinate with key events (public and private). This must include, but not be limited to: a) Identifying key events prior to construction and other works, and maintaining a register of key events during construction, in order to minimise disruption to those key events. b) Timely provision of construction schedules to allow for appropriate event planning. c) Timely notification of schedule changes that may impact upon major public events. d) Consideration of appropriate alternative sites and routes for events and parades and facilitation of relocation, if necessary.	All	Construction	Contractors
SC5	**Provide relocation support to community facilities** 1. Implement measures set out in the SRL Business and Residential Relocation Support Guidelines for community facilities including, but not limited to: a) Clayton Christadelphians b) Waverley RSL c) Monash City Church of Christ d) Monash Volunteer Centre e) Normanby House f) Monash Community Family Co-operative.	All	Construction	SRLA
SC6	**Minimise Disruption and Impacts on residents of Uniting AgeWell at Box Hill** 1. Appoint a senior stakeholder manager within SRLA to facilitate engagement and issue management between the contractor, SRLA and the operator of the Uniting AgeWell aged care facility (the Uniting AgeWell Facility) in accordance with SC1, with a focus on resident welfare and amenity.	SRL station at Box Hill	Design Construction	SRLA Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	2. Appoint an independent and suitably qualified aged care specialist to undertake an assessment in consultation with the operator of the Uniting AgeWell Facility to identify the specific sensitivities, needs and circumstances that should be taken into consideration in designing and implementing construction mitigation and management measures for the residents of the Uniting AgeWell Facility. This assessment should be informed by an understanding of the construction activities, mitigation measures and program proposed in SC6(3), as required. 3. Prepare and implement a site specific Uniting AgeWell construction management plan (UACMP) in consultation with the operator of the Uniting AgeWell Facility considering the assessment prepared by the independent aged care specialist. The IEA must verify the UACMP and seek advice from the independent aged care specialist, as required. The UACMP must include measures to address the particular needs of the Uniting Agewell Facility during construction, which must include (but not necessarily be limited to): a) Identification of amelioration measures to be implemented prior to the commencement of construction activities at the Uniting Agewell Facility and/or within the Project land. b) Identification of amelioration measures to be implemented during the different phases of construction at the Uniting Agewell Facility and/or within the Project land considering, but not necessarily limited to, relevant measures identified in NV3 and as required by AQ1, LV1, LV4 and LV5. c) Identification of measures to treat the interface with the Uniting AgeWell Facility in accordance with the UDS and POSF. d) Layout of the construction site within the Project land at Box Hill Gardens taking into consideration the amenity of the residents of the Uniting AgeWell Facility, with the boundary of the construction site being at least 10 metres from the Uniting AgeWell southern fence line. Development associated with ancillary activities such as utility installations, fences, access paths, directional signs, landscaping, park furniture and lighting will be permitted within the setback from the Uniting AgeWell southern fence line to the construction site for the station. e) Identification of all at-receiver mitigation measures which, subject to the consent of the operator of the Uniting Agewell Facility, should be implemented at the Uniting AgeWell Facility. These measures may include glazing, air conditioning, landscaping, boundary treatments, and any other measures identified in the assessment conducted by the independent aged care specialist in accordance with SC6(2). 4. Review the UACMP on a six-monthly basis, in consultation with the operator of the Uniting AgeWell facility and, as required, advice from the independent aged care specialist. The reviews must respond to the different phases of construction to be undertaken at the Box Hill construction site.			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
SC7	**Develop a voluntary residential property purchase scheme** 1. Prepare and implement a scheme that provides the opportunity for voluntary purchase of residential properties that satisfy defined criteria relating to the duration of construction impacts, the significance of those impacts on those residences and any operational impacts where NV18(1)(d) is required to be implemented. The scheme must include principles and criteria for eligibility for residential properties which are developed having regard to: a) proximity of the residence to major construction works, and b) likely or actual extent and duration of proximate works; c) access constraints; d) cumulative effects of construction concurrent with other major developments in close proximity to the residential property; and e) cumulative impacts on the residential property f) for operational impacts where NV18(1)(d) is required to be implemented, whether the management actions prior to offering compensation, including voluntary purchase, have been undertaken. g) special needs or circumstances of the owner of the residential property.	All	Construction Operation	SRLA
Surface Water				
SW1	**Develop and implement a Surface Water Management Plan during construction** 1. Develop and implement a Surface Water Management Plan for construction (including during any breaks in construction), in consultation with EPA Victoria, Melbourne Water and other relevant authorities (e.g. councils), that sets out requirements and methods for: a) Sedimentation and erosion control and monitoring, in general accordance with EPA Victoria's publications: Construction techniques for sediment pollution controls (EPA Publication 275), Civil construction, building and demolition guide (EPA Publication 1834), Erosion, sediment and dust: treatment train (EPA Publication 1893), Managing soil disturbance (EPA Publication 1894), and Managing stockpiles (EPA Publication 1895) b) Liquid handling and storage techniques, in general accordance with EPA Victoria's publications: Liquid storage and handling guidelines (EPA Publication 1698) and Civil construction, building and demolition guide (EPA Publication 1834)	All	Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	c) Managing stormwater to meet objectives outlined in Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999), the Victorian Environment Reference Standard, and to maximise opportunities for reuse on site so far as reasonably practicable, in accordance with the Urban stormwater management guidance (EPA Publication 1739.1) and the SRL East Integrated Water Management Strategy as required by SW9 d) Managing potentially contaminated surface water runoff, in general accordance with EPA Victoria's publications Civil construction, building and demolition guide (Publication 1834) and Civil construction, building and demolition guide (EPA Publication 1834). Contaminated surface water runoff must not enter the stormwater drainage network or receiving waterways, so far as reasonably practicable (see SW6) e) Measures for working within or adjacent to waterways, in general accordance with EPA Victoria's publications: Working within or adjacent to waterways (EPA Publication 1896) and Civil construction, building and demolition guide (EPA Publication 1834) f) Contingency measures for responding to surface water incidents such as leaks and spills or un-authorised discharges g) Maintaining the key hydrologic and hydraulic functionality and reliability of existing flow paths, drainage lines and floodplain storage h) Retaining existing flow characteristics to maintain waterway stability downstream of construction i) Location and bunding of any contaminated material (including tunnel spoil and stockpiled soil) away from drainage lines and areas potentially impacted by flooding and to the requirements of EPA Victoria and the relevant drainage authority (also see C3) j) Program works to minimise or avoid flood-related risks k) Bunding of excavations including tunnel portals and interchanges to an appropriate level during the construction phase l) Documenting the existing condition of all drainage assets potentially affected by the works (including their immediate surrounds) to enable baseline conditions to be established and potential construction impacts on these assets to be assessed and managed.			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
SW2	**Develop and implement flood emergency management plans** 1. Develop and implement flood emergency management plans for construction and operation. Flood emergency management plans are to include (but not be limited to) measures to manage flood risk to construction sites (including consideration of scheduling works and links to flood warning systems), the tunnels and tunnel portals including interchanges and substations, and operation, maintenance and emergency management procedures for flood protection works. 2. Inform the flood emergency management plans by a flood immunity risk assessment that considers a range of events, and is developed in consultation with relevant statutory authorities.	All	Construction Operation	Contractors
SW3	**Minimise risks from changes to flood levels, depths, flows and velocities** 1. Undertake site inspections of existing conditions and modelling of the existing conditions and the design of permanent and temporary works to demonstrate the design of the permanent and temporary works is compliant with Melbourne Water *Standards for infrastructure projects in flood prone areas* (2019). The risk of blockage of key drainage infrastructure is to be included in this assessment. 2. Develop and implement measures for temporary and permanent works in consultation with the relevant statutory authority to: a) maintain existing flood plain storage capacity and flooding regime b) avoid increasing flood levels, depths, flows, velocities or flood hazards that result in adverse impacts to property, infrastructure or the environment, and/or c) avoid or minimise erosion due to overland flooding during construction or operation. 3. Confirm these measures by an assessment that includes site inspections and flood modelling of the existing conditions and the design of permanent and temporary works in consultation with the responsible authority, which demonstrates that adverse impacts are minimised or avoided. Consultation with the relevant drainage authority should identify and discuss the potential to assist in managing existing flood risks. 4. Ensure permanent or temporary works do not increase the overall flood risk unless the written acceptance of the relevant flood plain manager, drainage authority or asset owner is obtained. 5. Ensure that the final models (and any subsequent updated models) represent the "as constructed" information, demonstrate that the design objectives are being met, and are verified by the IEA.	All	Design Construction Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
SW4	**Model climate change effects on surface water** 1. Consider current climate conditions as well as projected future climate change conditions over the Project design life in undertaking surface water (including flood and water quality) assessments for the purposes of these EPRs. 2. Base these assessments on Melbourne Water *Standards for infrastructure projects in flood-prone areas* (2019) and the Victorian Climate Projections (VCP) for 2050 and 2090 timeframes. Additionally, as the Project has a design life further into the future than these guidelines extend, assessments must also be 'based on a comprehensive analysis of the best practicably available information at the time modelling is undertaken to assess the potential impacts of climate change' over the Project's design life, in line with the guiding principles of the *Climate Change Act 2017* (Vic). 3. NOTE: Due to the Project's distance from Port Phillip Bay, sea level rise impacts do not need to be considered in the assessment of flood risk.	All	Design Operation	Contractors
SW5	**Design and operate SRL East to manage stormwater runoff** 1. Prepare a Stormwater Management Plan, in consultation with relevant stakeholders (Melbourne Water, local councils, EPA Victoria) which identifies the stormwater treatments that will be used during operation to minimise risk of harm from stormwater runoff and to ensure the stormwater runoff meets, at minimum, the objectives outlined in EPA Publication 1739.1 Urban stormwater management guidance and the Victorian Environment Reference Standard. 2. Ensure the Stormwater Management Plan: a) details how runoff generated at each of the Project components during operation is to be managed in accordance with principles outlined in the Integrated Water Management Strategy (SW9) and UDS; b) addresses the management and maintenance of operational treatment assets; and c) considers the ultimate ownership of any operational treatment assets and any necessary arrangements to facilitate this. 3. Include modelling in the Stormwater Management Plan to demonstrate that stormwater runoff entering the stormwater system and receiving waterways can meet quality and quantity objectives outlined in EPA Publication 1739.1 during operation, or other guidance that supersedes this document. Modelling should be completed in general accordance with Healthy Waterways Strategy Stormwater Targets Practitioner's Note (Melbourne Water 2021). Ensure modelling of water quality treatment accounts for all site surface water flows (not just incremental flows, based solely on the change to impervious site area from the Project)	All	Design Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	4. Demonstrate in the Stormwater Management Plan that appropriate at-source controls have been considered to minimise the risk of harm from changes to stormwater run-off to existing or modified stormwater systems and receiving waterways so far as reasonably practicable. 5. Ensure that the OEMP (EMF Table 5.2) is informed by, and that SRL East is operated in accordance with, the Stormwater Management Plan			
SW6	**Manage wastewater** 1. Manage wastewater in accordance with the Integrated Water Management Strategy (SW9) and the waste management hierarchy – in order of decreasing preference: avoidance, reuse, containment, and disposal. Wastewater includes, but is not limited to, contaminated surface water runoff, surface water within the existing pond on the Stabling Facility Project Land and any other wastewater generated by construction activities (excluding uncontaminated stormwater) and internal drainage water collected during operation. Disposal of groundwater is considered under GW4. 2. Discharge wastewater to sewer in accordance with a trade waste agreement. 3. If discharge to sewer is not possible due to insufficient capacity within the sewer network, discharge to the stormwater drainage network or waterways must occur in accordance with a wastewater discharge management plan that has been prepared in consultation with EPA Victoria and other relevant authorities (e.g. owners of drainage assets, Melbourne Water as the waterway manager). 4. Prepare a wastewater discharge management plan to discharge to the stormwater network or a waterway if required. The plan must include: a) Scenarios under which discharge to the stormwater network, or a waterway may be required b) Methods for characterising baseline ambient conditions of receiving waterways c) Methods for characterising quality of wastewater to be discharged in general accordance with *Sampling and analysis of waters, wastewaters, soils and wastes* (EPA Publication IWRG701) d) Methods for wastewater treatment prior to discharge e) Controls that will be used to minimise risks of harm 5. Ensure wastewater to be discharged to the stormwater drainage network or waterways is of sufficient quality to minimise the risk of harm to human health and the environment from the discharge. This will require consideration of baseline ambient conditions and the Environment Reference Standard of the EP Act.	All	Design Construction Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
SW7	**Develop and implement a Water Quality Monitoring Program** 1. Develop and implement a Water Quality Monitoring Program which can: a) Prior to construction: characterise the baseline condition of receiving waters and existing water quality infrastructure potentially impacted due to Project construction activities b) During construction: monitor water quality changes in receiving waters due to Project activities c) Post construction: confirm water quality conditions are maintained. 2. Ensure the monitoring program: a) Is developed in consultation with EPA Victoria, Melbourne Water (as the waterway manager) and asset owners (where applicable) b) Specifies locations, parameters, and frequency of monitoring (refer to C1) c) Includes a plan to check the effectiveness of controls that are implemented to mitigate potential risks to surface waters, and detail additional and/or improved measures that would be implemented should those controls fail or are not effective to eliminate or minimise risks of harm to surface waters. d) Is tailored to address data gaps (for example, lack of water quality data for Clayton South Drain, lack of baseline flow and water quality data to characterise the interaction between groundwater and Dampers Creek) and potential for impact (for example, Gardiners Creek is adjacent to the SRL station at Burwood). e) Outlines reporting documentation and distribution requirements for surface water monitoring, performance of controls and water quality data f) Continues for a minimum period of three years post construction g) Requires relevant stakeholders to be alerted in the event significant or unexpected changes in surface water levels, flow or quality, are detected during monitoring. 3. Outline conditions in the monitoring program under which changes to water quality parameters need to be investigated, when works on-site need to be stopped in response to changes in parameters and what action is required to rectify changes in water quality if they are attributable to the site construction.	All	Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	4. NOTE: General guidance for sampling of surface water is provided in EPA Victoria Publication IWRG701: sampling and analysis of waters, wastewaters, soils and wastes and the Australian and New Zealand Guidelines for Fresh and Marine Water Quality.			
SW8	**Develop and implement a management plan for naturalisation of Gardiners Creek** 1. Develop and implement a plan for naturalisation of Gardiners Creek in consultation with key stakeholders, including Melbourne Water (as the waterway manager) and Whitehorse Council. This plan must contain requirements and methods for minimising impacts to water quality or flooding regime within the reach subject to naturalisation works and areas potentially affected by change in water quality or flows. The plan must also contain requirements as outlined in EC5. 2. Align the plan with the approved UDLPs for the SRL station at Burwood.	SRL station at Burwood	Design Construction	Contractors
SW9	**Develop and implement an Integrated Water Management Strategy** 1. Develop and implement an Integrated Water Management Strategy in consultation with EPA Victoria, Melbourne Water, relevant local councils, relevant water corporations and Monash and Deakin Universities, in general accordance with the approach outlined in the Integrated Water Management Framework for Victoria (DELWP, 2017). The Integrated Water Management Strategy process, including engagement with these stakeholders, must be initiated as early as practically possible. 2. Ensure the Integrated Water Management Strategy outlines the principles for water management during both the construction and operational phases of the Project to maximise opportunities for reuse of water (including for irrigation), achieve flood mitigation, avoid flow and water quality impacts, enhance infiltration and provide broader environmental benefits (including assisting with urban heat island effect, improved human health and amenity outcomes). The Integrated Water Management Strategy must inform detailed design requirements to enable the realisation of these benefits. 3. Ensure the Integrated Water Management Strategy is informed by the UDS and informs: a) Management of water within the Surface Water Management Plan for construction (SW1) b) Management of stormwater runoff during operation (SW5) and c) Management of wastewater (SW6). 4. Ensure the Integrated Water Management Strategy: a) as far as practicable, considers existing and proposed surface water assets, as well as approved future development as known by 5 August 2022 which may impact on SRL surface water assets	All	Design Construction Operation	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	b) guides how Project sustainability targets relating to surface water will be achieved c) outlines requirements for the use of best practice Integrated Water Management approaches to be used in design development and the preparation of the Surface Water Management Plan (SW5) d) outlines project wide and site-specific opportunities for Water Sensitive Urban Design and Integrated Water Management, and how these will be integrated into design solutions.			
SW10	**Provide access to drainage authority assets** 1. Provide adequate access for ongoing maintenance of drainage authority assets that are impacted by the Project to the requirements of the relevant drainage authority.	All	Construction Operation	Contractors
Sustainability and Greenhouse Gas				
SGG1	**Develop Sustainability Targets and Performance indicators** 1. Develop sustainability targets for reducing greenhouse gas emissions, minimising and managing waste, minimising potable water consumption, maximising climate resilience, and achieving sustainable use of resources to the extent reasonably practicable throughout the design, construction, and operation of the Project. 2. Ensure these targets are consistent with those documented in the report prepared for the Suburban Rail Loop, Sustainability Objectives and Targets (October 2021) or equivalent. Progress against these targets must be reported against publicly on an annual basis during construction and operation.	All	Design Construction Operation	SRLA
SGG2	**Develop and implement a Sustainability Management Plan** 1. Develop and implement a Sustainability Management Plan that contains measures to meet, as a minimum, the sustainability targets required by SRLA, and the specified ratings under the relevant ISCA and Green Star rating tools. 2. Outline the approach for ongoing measurement, monitoring, reporting and mitigation to achieve sustainability targets and specified ratings in the Sustainability Management Plan.	All	Design Construction Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
SGG3	**Achieve a Sustainability Rating for Infrastructure** 1. Ensure Main Works tunnel and relevant elements of the Stabling Facility achieve sustainability outcomes aligned to a minimum rating of "Gold", under the Infrastructure Sustainability Council (ISC) Infrastructure Sustainability (IS) rating tool version v2.1 or a demonstrated equivalent rating level	Tunnels Stabling Facility	Design Construction	Contractors
SGG4	**Achieve a Sustainability Rating for Stations** 1. Ensure Stations achieve a Green Star rating of greater than or equal to 5-star, certified using the Green Building Council Australia (GBCA) rating tool Green Star Buildings, applying greater than or equal to version v1A.	All stations	Design Construction	Contractors
SGG5	**Achieve a Sustainability Rating for the Operations Control Centre** 1. Ensure the Stabling Facility Operational Control Centre achieves a certified National Australian Built Environment Rating System Energy rating of 6-star.	Operational Control Centre	Design Operation	Contractors
SGG6	**Achieve a Sustainability Rating for construction of the Operations Control Centre (Green Star)** 1. The Stabling Facility Operational Control Centre must achieve a Green Star rating of greater than or equal to 5-star, certified using the Green Building Council Australia (GBCA) rating tool Green Star Buildings, applying greater than or equal to version v1A.	Operational Control Centre	Design Construction	Contractors
SGG7	**Achieve an Operational Offset** 1. Ensure the Project achieves carbon neutral emissions in operations through offsetting residual emissions sources after implementing avoidance and reduction strategies.	All	Operations	SRLA
SGG8	**Implement opportunities for electrification or lower carbon fuels** 1. Investigate and implement opportunities for electrification of construction plant or the use of alternative lower carbon fuels such as hydrogen and biofuels to the extent reasonably practicable.	All	Design Construction	Contractors
SGG9	**Purchase electricity from renewable sources of energy in construction** 1. Investigate and implement opportunities for the purchase of renewable electricity for fixed electric plant, including tunnel boring machines, to the extent reasonably practicable during construction.	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
SGG10	**Use lower carbon materials** 1. Investigate and implement opportunities for the use of lower carbon materials supportive of Victoria's circular economy goals to the extent reasonably practicable.	All	Design Construction Operation	Contractors
Traffic and Transport				
T1	**Develop and implement Transport Management Plan(s) (TMP)** 1. Develop and implement TMPs to minimise disruption to affected local land uses, traffic, car parking, public transport (rail, tram and bus), pedestrian and cycle movements and existing public facilities during all stages of construction prior to the commencement of relevant works. A TMP may be split into precincts where appropriate, but each must consider and be coordinated with other precinct TMPs in its development. 2. Ensure TMPs are developed in consultation with affected and responsible road authorities, universities, and the Transport Management Liaison Group (refer to T2). 3. Inform and support the TMPs by an appropriate level of transport modelling that maintains appropriate transport capacity and performance for all travel modes in the peak travel demand periods including pedestrians and cyclists. 4. TMPs must, as a minimum, include: a) Management of any temporary or permanent full or partial traffic lane closures or impacts to lanes and property access b) Requirements for limiting the amount of construction haulage during the peak demand periods c) A monitoring program to assess the effectiveness of the TMPs on all modes of transport d) Where monitoring identifies adverse impacts, implement practicable and appropriate mitigation measures e) Parking measures and controls to minimise impacts on the precincts f) Consideration of construction activities for other relevant private and public major projects occurring concurrently with construction activities for SRL East and potentially impacting modes of transport in the same area	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	g) Measures to minimise, so far as reasonably practicable, the time needed to temporarily fully or partially close roads and paths for construction.			
T2	**Establish and convene a Transport Management Liaison Group (TMLG)** 1. Establish and convene a TMLG before the commencement of any works that may impact existing roads, paths or public transport infrastructure. The TMLG must include representatives of the Department of Transport (DoT), emergency services, the relevant contractors, relevant transport authorities and relevant local governments. 2. Provide for the TMLG to be a forum for exchanging information and the discussion of issues associated with the development of TMPs. The TMLG will be responsible for reviewing and providing feedback on: a) TMPs b) Relevant designs and methodologies for monitoring implementation of TMPs and construction traffic monitoring c) Transport modelling and proposed transport network upgrades to mitigate the transport effects of constructing the Project d) Road safety audit reports 3. Provide for the TMLG to: a) Where construction activities have the potential to significantly impact specific stakeholder or community group facilities, be satisfied that adequate consultation has occurred to inform the TMPs; b) Consider inviting stakeholder representatives to relevant TMLG meetings; c) Where construction activities have the potential to significantly impact specific stakeholder or community group facilities, be satisfied that the TMPs include measures that are consistent with the EPRs and minimise disruption to other transport users so far as reasonably practicable; d) Meet at least monthly until construction works are complete, unless otherwise agreed by the TMLG; e) Consider the implications for surface traffic and transport operations, network performance, parking and other transport management implications of the Project.	All	Design Construction	SRLA

Number	Environmental Performance Requirement	Project component	Timing	Implementation
T3	**Manage road transport impacts during Construction** 1. Ensure the TMP(s) address the following for road transport management: a) **Road network management** i. Develop and implement suitable measures in consultation with emergency services, so that emergency service access is not inhibited due to Project construction activities. ii. Maintain suitable access for deliveries and specialised user access where relevant in proximity to the works. Consultation with the relevant road authority and property owners must be undertaken should access be impacted or cannot be maintained. iii. Develop and implement waste collection plan(s) in consultation with local governments and private waste collection services before relevant construction works to manage any impacts on waste collection and waste storage. b) **Construction trucks** i. Identify potential routes for construction vehicles travelling to and from all SRL construction work sites, avoiding sensitive receptors and the use of local streets where practicable. ii. Provide construction vehicle staging areas and/or construction methodologies to minimise potential impacts of truck movements on residents and businesses. iii. Provide special arrangements for the delivery or removal of oversize and over mass loads. 2. **Construction Parking Management Plan(s) (CPMPs)** Prepare CPMPs in consultation with the relevant road authority to manage parking in and around the construction sites. Each CPMP must be coordinated with the TMP and outline: i. How impacts on existing users, particularly those with special needs, and the loss of public parking would be minimised through construction. ii. The level of accessibility to loading zones that would be provided to enable the ongoing supply of goods to businesses. iii. How suitable alternative parking would be provided where practicable to replace public, private and commuter parking lost or inaccessible as a result of construction activities and to prevent parking at undesignated locations on local roads.	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	iv. What parking will be provided for construction workers at construction compounds or designated locations where practicable, and include requirements to minimise impacts on local streets, community and commercial facilities. This must include: 1) Measures to manage the use of off-street and private car parks by construction workers so that it is by prior agreement with the relevant land manager 2) Measures to prevent, to the extent practicable, construction workers parking in on-street spaces, unless it can be demonstrated by car parking surveys there is adequate on-street supply v. Measures to encourage construction workers to travel to / from worksites by means other than private vehicle and/or outside peak times. This should include: 1) Provision for on-site tool storage where practicable 2) Parking for construction workers must be on-site or nearby 3) Consideration given to the use of shuttle buses to ferry workers to and from off-site car parks vi. How and when parking would be re-instated (Refer to T7). 3. Undertake a traffic assessment to evaluate the need for upgrades to Kingston Road, or other mitigation measures, to improve road safety performance, access and connectivity on Kingston Road. The traffic assessment must address the feasibility of, timing and need for: a) Widening Kingston Road to a four-lane road along the frontage of the Stabling Facility site between Old Dandenong Road and Nicholas Grove;~~,~~ and b) The location of a permanent pedestrian crossing facility between Nicholas Grove and Pietro Road; c) New, enhanced or relocated bus stops on Kingston Road between Old Dandenong Road and Nicholas Grove; and d) Providing a permanent local alternative to accommodate the right turn demand from Old Dandenong Road north approach into Kingston Road~~-~~that minimises the increase in travel time for that movement.			

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	4. The project must implement: a) a pedestrian crossing across Kingston Road between Nicholas Grove and Pietro Road prior to using access gates on Kingston Road; and b) a permanent local alternative to accommodate the right turn demand from Old Dandenong Road north approach into Kingston Road prior to the closure of Old Dandenong Road and the use of access gates on Kingston Road; and c) any other works determined in response to the traffic assessment.			
T4	**Manage public transport impacts during construction** 1. Ensure the TMP(s) address the following for public transport management: a) Before the commencement of relevant works, develop and implement a plan to manage construction work disruptions to railway land and services. The plan should be developed in consultation with DoT, VicTrack, and Metro Trains Melbourne (MTM), as relevant. b) Provide suitable routes for pedestrians to maintain connectivity where access is altered by the Contractor for users of existing railway stations, of tram and bus stops that are relocated or are constructed during works, and around all construction sites including providing Disability Discrimination Act-compliant (DDA) access where practicable. c) Develop and implement measures to minimise disruption to the tram and bus networks and services from the Project's construction in consultation with the relevant road management authorities, public transport operators and DoT, including but not limited to: i. Options to divert bus services impacted by temporary or permanent road closures ii. Tram routes on Burwood Highway and Whitehorse Road iii. Options to prioritise bus services through or along bus routes impacted by construction activities or ground improvements, particularly associated with the Cheltenham, Clayton, Deakin University and Box Hill bus interchanges iv. Bus replacement services for disrupted rail passengers.	All	Design Construction	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
T5	**Manage active transport impacts during construction** 1. Ensure the TMP(s) address the following for active transport: a) Develop and implement transport management measures in consultation with relevant road management authorities for active transport modes having regard to any relevant guidelines published by relevant road management authorities. b) Maintain connectivity and reasonable performance levels throughout construction for pedestrians and cycle riders in on-road and off-road environments. c) Develop and implement active control and wayfinding information at construction worksite access points to maintain safety by avoiding potential conflicts between trucks and active transport modes including vulnerable users. d) Manage closure or diversion of footpaths to maintain connectivity, connections and provide safe alternative routes for active transport modes in consultation with the relevant road authority. e) In consultation with councils, provide suitable routes for cyclists and pedestrians throughout construction to maintain connectivity for road and shared path users around the construction areas. f) Maintain appropriate pedestrian access to adjoining properties adjacent to or within construction areas.	All	Design Construction	Contractors
T6	**Road transport design and operation** 1. Design all roadworks to relevant design standards to maintain safety of movement in consultation with the relevant road management authorities and TMLG, as required. Designs should be underpinned by appropriate transport analysis with the objective to maximise performance for all modes and the aspirational Movement and Place outcomes and be in accordance with the UDS. 2. Develop and implement street network designs for each affected street within the Project Land in consultation with the relevant road management authorities that includes: a) The design of the road network should reflect the aspirational Movement and Place outcomes for each precinct as well as changed demands as a result of the Project b) Maintaining safe operations through the precincts.	All	Design Operation	Contractors SRLA (EPR T6 (2)(c), (3)(d) and (5) only)

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	c) Assessment of the potential closure of Carinish Road, Clayton and Coleman Parade, Glen Waverley. The designs ultimately adopted at each location must consider pedestrian safety and traffic movements in the surrounding street network. 3. Develop and implement a plan for each precinct to manage reinstated parking within the Project Land, in consultation with relevant road management authorities, that: a) Minimises the permanent loss of parking where possible and determine the optimal parking provision in the area, including prioritising meeting specialised parking needs within the precinct such as emergency services, loading and DDA compliant parking. b) Reduces the risk of overflow parking in local streets c) Provides alternative locations for station commuter parking impacted during construction identified in consultation with relevant stakeholders. If needed this may be provided outside the Project Land. d) Includes recommended Pick Up / Drop Off (PuDo) locations following further assessment during the design phase. 4. Ensure that vehicle and pedestrian access is reinstated appropriately where vehicle and pedestrian access are altered during construction in accordance with relevant road design standards, and they reflect the aspirational Movement and Place outcomes for each precinct as well as changed demands as a result of the Project. 5. Collaborate with DoT and Councils to manage the operation of the road network in the vicinity of SRL precincts for all road users. This would encourage appropriate mode of access to the station precincts and to discourage through traffic. This should include reviewing the performance of the wider network so that opportunities to re-distribute through traffic away from station precincts can be pursued and sensitivity testing of different precinct development scenarios.			
T7	**Public transport design and operation** 1. Design the SRL stations and new bus interchanges to ensure integration with existing and planned future uses so they provide connections to key destinations and existing railway stations and bus interchanges and be in accordance with the UDS. The design should also provide adequate wayfinding to facilitate passenger transfers. 2. Implement measures to address pedestrian congestion at and around station entrances where they interface with the precincts, to the extent practicable, in consultation with relevant road management authorities. 3. Develop designs having regard to the following reviews:	All	Design Operation	Contractors

Number	Environmental Performance Requirement	Project component	Timing	Implementation
	a) Review of bus services in the areas around the SRL stations and the Stabling Facility to be led by DoT in consultation with SRLA. b) Review of tram services in the precincts (where relevant) to be led by DoT in consultation with Yarra Trams and SRLA to optimise the functionality and performance of SRL stations.			
T8	**Active transport design and operation** 1. Actively design for and connect designated cycling routes within the Project Land in consultation with the relevant road management authority, local Council and universities (in respect of University land). Reinstate on-road cycle lanes and cycle parking provisions removed during construction, except where agreed with the relevant road authority. This should reflect the aspirational Movement and Place outcomes for each precinct and be in accordance with the UDS. 2. Review the reinstatement and provision of safe and effective pedestrian access in and around SRL stations as well as bus and tram sites in consultation with the relevant road management authorities and the relevant local government. 3. Provide wayfinding information to enhance connectivity for pedestrians, cyclists and public transport users to move to, from, through and within the interchanges and precincts. 4. Consult with the TMLG on active transport, where required. 5. Undertake an assessment of cycle flows along Normanby Road and pedestrian flows into Monash University beyond Normanby Road to inform: a) the need for works within the campus b) the need for an alternative entry south of Normanby Road c) the design of Normanby Road/Scenic Boulevard/Howleys Road intersection. 6. Undertake an assessment of the need for any upgrade works to the pedestrian route to the Box Hill Bus Interchange, within the Box Hill central shopping centre, or the need to relocate the bus interchange.	All	Design Operation	SRLA (EPR T8(5) and (6) only) Contractors

SUBURBAN RAIL LOOP

More information

To find out more about Suburban Rail Loop:**W** suburbanrailloop.vic.gov.au

E contact@srla.vic.gov.au

P 1800 105 105 (24 hours a day, 7 days a week)

Suburban Rail Loop AuthorityPO Box 4509, Melbourne, VIC 3001

VICTORIA'S BIG BUILD

VICTORIA State Government

Authorised and published by the Victorian Government,
1 Treasury Place, Melbourne.