

Melbourne Metro Rail Project

PREPARED FOR RAIL PROJECTS VICTORIA

**MMR-AJM-PWAA-RP-NN-005117
MAIN WORKS (RAIL INFRASTRUCTURE
ALLIANCE) ENVIRONMENTAL AUDIT
SUMMARY REPORT 2020 & 2021**

14 OCTOBER 2022

REVISION P2



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Glossary

TERM / ABBREVIATION	DESCRIPTION
AQMP	Air Quality Management Plan
AQIA	Air Quality Impact Assessment
AJM JV	Aurecon Jacobs Mott MacDonald Joint Venture
BDP	Business Disruption Plan
BSGC	Business Support Guidelines for Construction
CEMP	Construction Environmental Management Plan
CHMP	Cultural Heritage Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CSEMF	Community and Stakeholder Engagement Management Framework
CSEMP	Community and Stakeholder Engagement Management Plan
CYP	Cross Yarra Partnership
DoT	Department of Transport
EES	Environment Effects Statement
EMF	Environmental Management Framework
EMS	Environmental Management System
EPRs	Environmental Performance Requirements
HMP	Heritage Management Plan
HCMTs	High Capacity Metro Trains
IEA	Independent Environmental Auditor
ISO 14001:2015	AS/NZS ISO 14001:2015 <i>Environmental management systems — Requirements with guidance for use</i>
MMRA	Melbourne Metro Rail Authority
MTIA	Major Transport Infrastructure Authority
MTP or Project	Metro Tunnel Project
OEMP	Operational Environmental Management Plan
PIO	Where in the course of the audit work, an opportunity has been identified to improve a process or procedure.
RIA	Rail Infrastructure Alliance
RIMG	Residential Impact Mitigation Guidelines
RNA	Rail Network Alliance
RPV	Rail Projects Victoria
RSA	Rail Systems Alliance
SEIP	Site Environmental Implementation Plan
SWMP	Surface Water Management Plan
TPZ	Tree Protection Zone

TERM / ABBREVIATION	DESCRIPTION
TMP	Traffic Management Plan
UDMP	Urban Design Management Plan
UDS	Urban Design Strategy
VAGO	Victorian Auditor-General's Office
VAGO Early Works Audit Report	Victorian Auditor-General's Office (6 June 2019) <i>Melbourne Metro Tunnel Project – Phase 1: Early Works</i>
WMS	Work Method Statement
WSUD	Water Sensitive Urban Design

1. Executive Summary

The Metro Tunnel Project (MTP) is currently under construction and will create a new end-to-end rail line from Sunbury in the west to Cranbourne/Pakenham in the south-east, with high capacity trains and five new underground stations. The first works package, the MTP Early Works, which included relocation of services and site preparation works prior to major construction (Main Works) commencing, has been completed.

The Victorian Auditor-General's Office (VAGO) undertook an audit of the Early Works Package and published its report *Melbourne Metro Tunnel Project – Phase 1: Early Works* on 6 June 2019 (VAGO Early Works Audit Report). A key recommendation of the VAGO Early Works Audit Report, regarding its assessment of environmental strategies and risk mitigation, was to develop summaries of the Project's Independent Environmental Auditor (IEA) reports and publish such summaries on the MTP official website. The Project's Environmental Management Framework (EMF) requires an IEA to undertake environmental audits of compliance with the EMF.

This report has been developed to meet the above recommendation of the VAGO Early Works Audit Report and provide the wider public with information of the Project's environmental performance during the Main Works. This report covers alliance package works during the period starting 2020 until the end of 2021. While there are two work packages being delivered as alliances on the MTP (the Rail Infrastructure and Rail Systems Packages), as the Rail Systems works relevant to the EMF had not progressed by the end of 2021, audits were only conducted for the Rail Infrastructure Package during the period relevant to this report. The auditing program within the scope of this report identified that, in general, the works were undertaken in accordance with the requirements of the EMF, relevant Environmental Performance Requirements (EPRs) and MTP Incorporated Document.

The auditing process is designed to lead to continual improvement during projects - this is key to AS/NZS ISO 14001:2015 *Environmental management systems — Requirements with guidance for use* (ISO 14001:2015) and best practice environmental management. As such, observations, areas for improvement and non-conformances were identified. These were typically addressed in a timely manner by the Delivery Partner and closed during the subsequent audits.

2. Introduction

2.1 Purpose

Rail Projects Victoria (RPV) engaged Aurecon Jacobs Mott MacDonald Joint Venture (AJM JV) to prepare a summary report of the IEA audit reports for the MTP Main Works from start of 2020 until the end of 2021. This report relates to the Rail Infrastructure & Systems Packages for the Project and summarises findings from the IEA audits undertaken in the same time period.

This request follows a recommendation outlined in the VAGO Early Works Audit Report. That report assessed the environmental strategies and risk mitigation and recommended that the Department of Transport (DoT) publish summaries of key findings and recommended actions from past and future IEA reports produced for the MTP on the Project's official website. The purpose of this audit summary report is to meet the above recommendation of the VAGO Early Works Audit Report and provide the wider public with information of MTP's Rail & Systems Packages environmental performance during the Main Works Package (from start of 2020 to end of 2021).

2.2 Project Background

2.2.1 THE METRO TUNNEL PROJECT

The Victorian Government is building the MTP to connect the Sunbury line to the Cranbourne and Pakenham lines through the construction of new twin nine-kilometre rail tunnels and five new underground stations. MTP is transforming Melbourne's rail network into an international-style metro system, boosting the capacity of the rail network to keep pace with Melbourne's growing population and rail patronage.

MTP will provide the foundation for expanding Melbourne's public transport network, helping to ensure Melbourne remains one of the world's most liveable cities now and into the future. MTP will also stimulate significant urban renewal, opening up opportunities for new housing, commercial development and jobs in and around the CBD, whilst improving train travel to and from the suburbs.

The infrastructure required for construction of MTP includes:

- Twin nine-kilometre rail tunnels from Kensington to South Yarra, connecting the Sunbury and Cranbourne/Pakenham railway lines through the CBD.
- Rail tunnel portals (entrances/exits) at Kensington and South Yarra.
- New underground stations at Arden, Parkville (under Grattan Street), State Library (at the northern end of Swanston Street), Town Hall (at the southern end of Swanston Street), and Anzac (under the Domain interchange on St Kilda Road). State Library and Town Hall stations will feature direct interchange with the existing Melbourne Central and Flinders Street Stations respectively.
- Train/tram interchange between Anzac Station and the Domain Interchange.
- High Capacity Signalling to maximise the efficiency of the new fleet of High Capacity Metro Trains (HCMTs) that will run along the Sunbury, Cranbourne/Pakenham lines and the Metro Tunnel in the future.

Some project elements nomenclature (e.g. station names) have changed during the delivery of the Project and audit findings may reflect superseded nomenclature, with the updated name provided in brackets.

2.2.2 MTP WORK PACKAGES

MTP is being managed on behalf of the Victorian Government by RPV, formerly known as the Melbourne Metro Rail Authority. RPV forms part of the Major Transport Infrastructure Authority (MTIA), which is responsible for facilitating the development and delivery of the biggest transport infrastructure program in Victorian history. Figure 2-1 shows a broad schematic plan for the principal components of MTP.

Construction of MTP is being delivered by RPV in partnerships with contracted Delivery Partners; through four separate works packages with different delivery partner(s) for each works package described in **Error! Reference source not found.** This report relates only to the Main Works: Rail Infrastructure Works Package.

TABLE 2.1: MTP WORKS PACKAGES

PACKAGE	DESCRIPTION
Early Works	The Early Works Package including three sub-packages of works, each respectively was delivered by a Managing Contractor, Yarra Trams and Utility Service Providers.
Main Works	The Tunnels and Stations Works Package, being delivered by Cross Yarra Partnership (CYP).
	The Rail Infrastructure Works Package associated with the Eastern and Western Tunnel Entrances and the western turnback, being delivered by the Rail Infrastructure Alliance (RIA).
	The Rail Systems Works Package for High Capacity Signaling, rail systems integration and commissioning, being delivered by the Rail Systems Alliance (RSA).

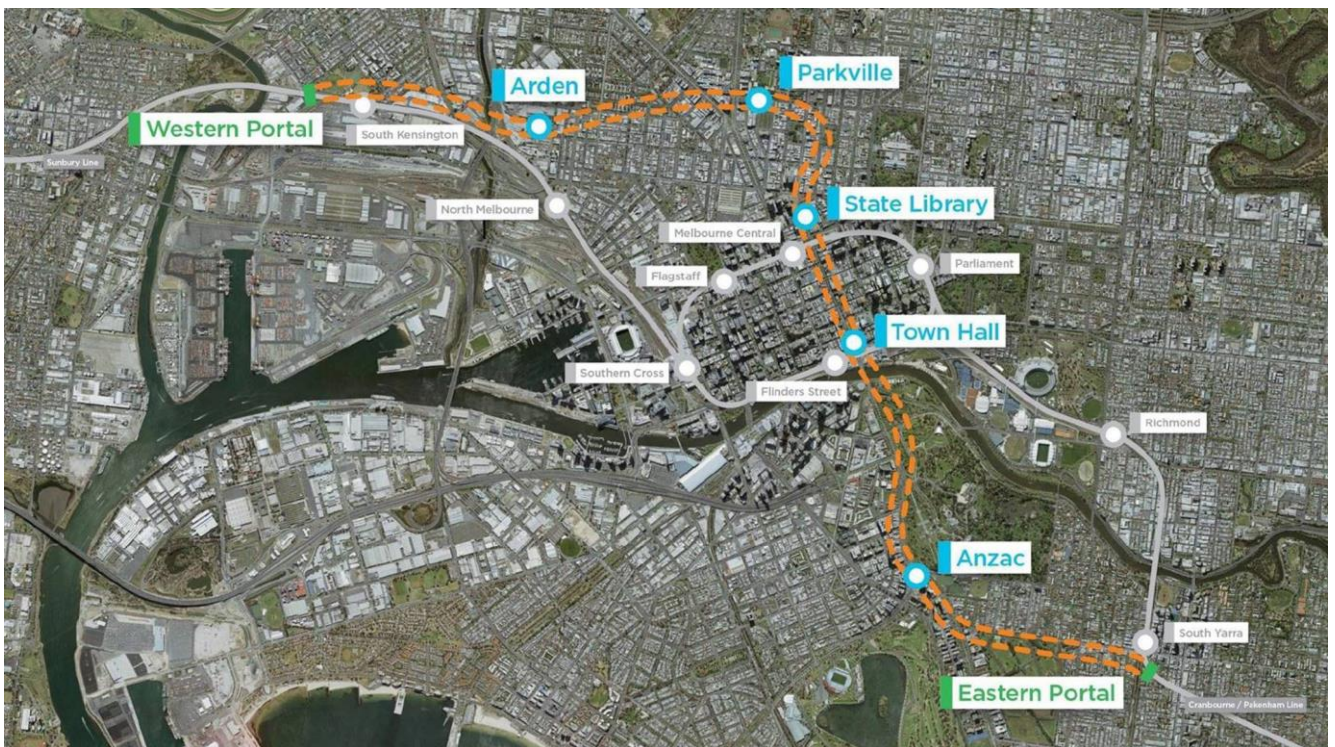


FIGURE 2-1: MTP SCHEMATIC PLAN

2.3 Scope

This report summarises environmental audits conducted as part of the MTP Main Works being delivered under the Rail Infrastructure Works Package. The report summarises the IEA reports undertaken from start of 2020 until the end of 2021, provided in Table 2.2.

The report covers all works for the Rail Infrastructure Works Packages of MTP conducted under the Planning Scheme Amendment (GC82) and associated Incorporated Document approved and published in the Government Gazette on 26 June 2018 and the associated Melbourne Metro EMF. Subsequent summary audit reporting (including activities under the Rail Systems Work Package) will be completed on an annual basis.

TABLE 2.2: IEA AUDIT REPORTS IN SCOPE

PACKAGE	SCOPE	RELEVANT IEA REPORTS IN SCOPE
GC82 - Rail Infrastructure Works, being delivered by Rail infrastructure Alliance (RIA)	Publish key findings for IEA Audit reports from Q1 2020 until Q4 2021.	KPMG Audit Reports: Q1 2020, Q2 2020, Q3 2020, Q4 2020, Q1 2021, Q2 2021, Q3 2021, Q4 2021
GC82 - Rail Systems Works, being delivered by Rail Systems Alliance (RSA)	Rail systems works have not commenced under GC82 and no IEA audits have been completed.	RSA has progressed design work for works under GC82, which is relevant to selected EPRs. However, no RSA works were audited during the period relevant to this report.

From 2022, RIA and RSA will integrate to form a consolidated alliance known as the ‘Rail Network Alliance’ (RNA), which will deliver the remaining infrastructure and systems works Metro Tunnel need for operation. The Rail Network Alliance will comprise John Holland, CPB Contractors, AECOM, Alstom, RPV and Metro Trains. Audit summary reports for subsequent reports will be combined for RNA.

The following Packages are excluded from this report and will be covered in separate reports:

- Tunnels and Stations Works Package, being delivered by CYP (report in development).

3. Environmental Management

3.1 Environmental Governance Framework

An Environment Effects Statement (EES) has been prepared for the MTP and, following the statutory EES process, an Incorporated Document was approved by the Minister for Planning, containing compliance obligations which must be achieved by the Delivery Partners.

Each Delivery Partner is required to:

- Comply with the requirements of the Incorporated Document under the Planning Scheme Amendment (GC82) which was approved and published in the Government Gazette on 26 June 2018.
- Comply with the Environmental Management Framework (EMF) that has been approved by the Minister for Planning and is published on the MTP website. Among other things, the EMF includes the Environmental Performance Requirements (EPRs), the Residential Impact Mitigation Guidelines (RIMG) and the Business Support Guidelines for Construction (BSGC).
- Comply with the EPRs, which includes a requirement to prepare plans to document the approach to compliance.
- Develop, implement and maintain a project-specific Environmental Management System (EMS) that meets the requirements of ISO14001:2015 Environmental Management Systems, Construction Environmental Management Plan (CEMP) and Site Environmental Implementation Plans (SEIPs) for the design and construction phases, where applicable.
- Develop a Community and Stakeholder Engagement Management Plan (CSEMP) consistent with the RPV CSEMP.

The governance framework and relevant roles and responsibilities for MTP are set out in the EMF and are included in Section 3 of this Summary Report.

The governance framework for MTP is presented in Figure 3-1.

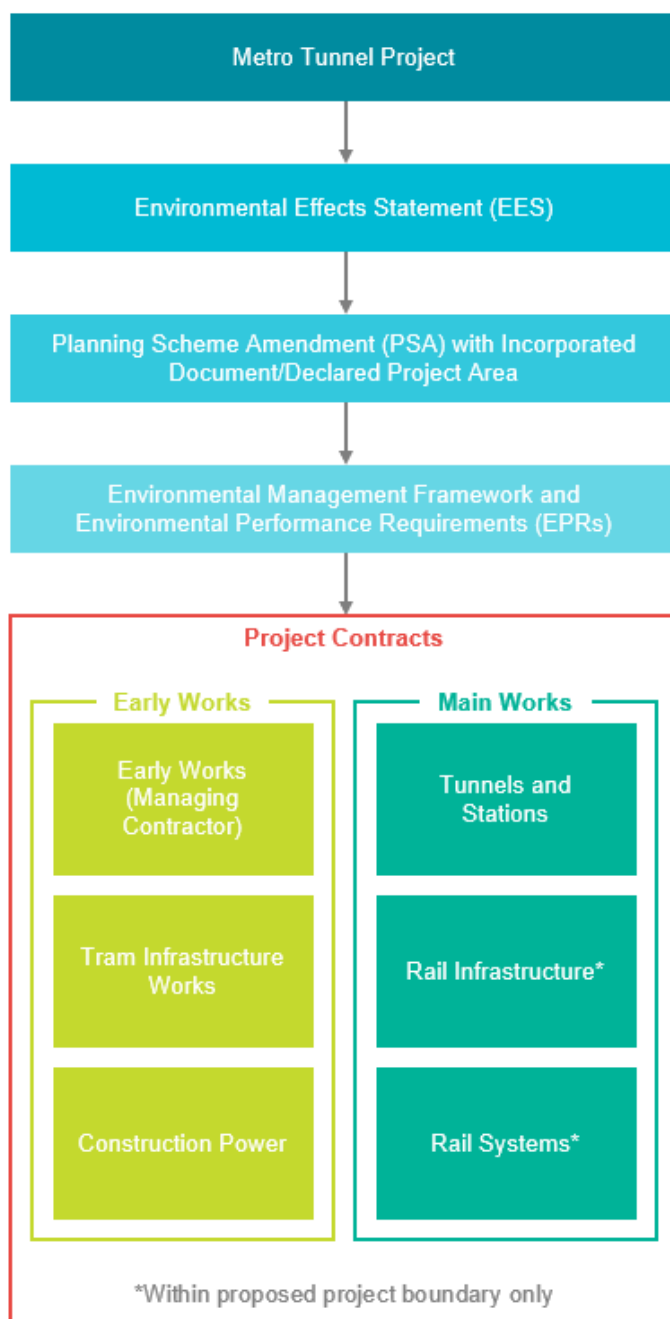


FIGURE 3-1: GOVERNANCE FRAMEWORK

3.1.1 ENVIRONMENTAL MANAGEMENT FRAMEWORK

The Incorporated Document describes the requirements of the EMF. The main elements of the EMF for the design and construction phase are:

- Applicable legislative requirements and approvals.
- EPRs, which address matters set out in the Incorporated Document and identified through the EES.
- The RIMG and the BSGC.
- A CEMP, together with subordinate document including SEIPs, EMS and other plans identified in the Incorporated Document and EMF.

The EMF documentation is summarised in Figure 3-2.

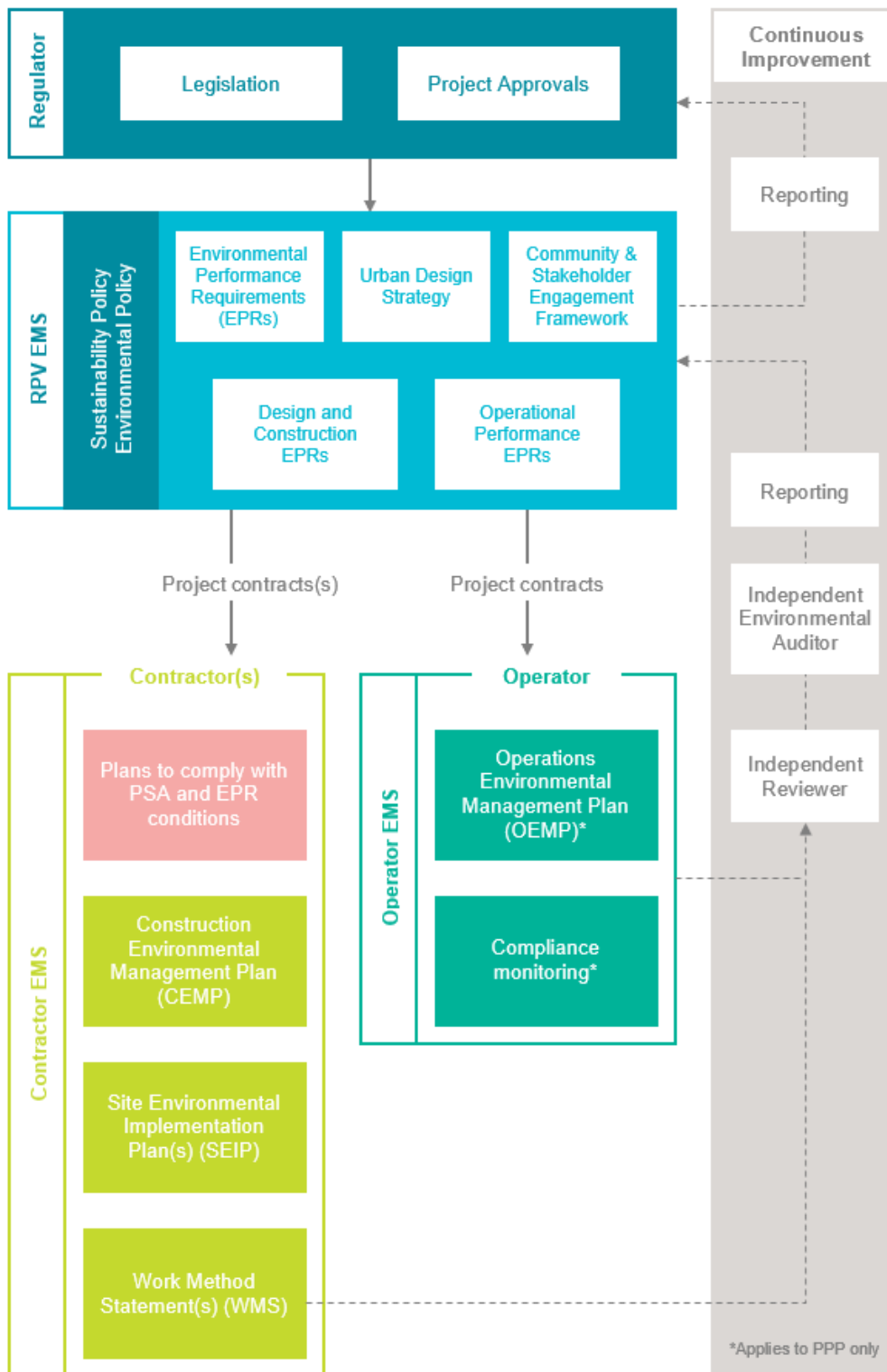


FIGURE 3-2: ENVIRONMENTAL MANAGEMENT FRAMEWORK

The EMF requires that the Delivery Partners develop and implement an EMS certified to ISO 14001:2015 and consistent with relevant legislation, policy and guidelines and RPV’s Environmental Policy.

The EMF provides the governance framework to manage environmental aspects identified through the EES process, including the Minister for Planning’s assessment, for the design, construction and operational phases of the MTP.

3.1.2 ENVIRONMENTAL PERFORMANCE REQUIREMENTS

EPRs have been developed through the EES and associated consultation processes, and to reflect the Minister for Planning's assessment of the EES and the requirements of the Incorporated Document.

MTP is required to be delivered in accordance with approved EPRs that define the project-wide environmental outcomes that must be achieved during design, construction and operation of MTP. This performance-based approach allows for a delivery model with sufficient flexibility to encourage innovation by the private sector to determine how any recommended EPRs would be achieved.

The EES presented a risk-based assessment of environmental effects of the MTP, in accordance with the EES Scoping Requirements. Potential mitigation measures were typically included in the EES as examples of how an environmental effect could be mitigated and to illustrate how an EPR could be implemented. However, the EES generally did not mandate or commit to a particular mitigation or management outcome. In the same manner, the EPRs do not typically mandate or require a particular mitigation or management solution. Instead, the EPRs are implemented by applying an assessment of the nature and extent of the relevant environmental effects, and the most practicable means of mitigating and managing those effects. This method is used so that the management and mitigation measures implemented are proportional to the effect they are designed to address and achieve the outcome prescribed by the EPR.

The Incorporated Document requires that the MTP is constructed and operated in accordance with the EPRs approved by the Minister for Planning. Each Delivery Partner is to comply with the EPRs and prepare necessary plans prior to commencement of their scope of work to document the approach to compliance with each EPR.

3.1.3 ASSOCIATED MANAGEMENT PLANS

RPV together with the Delivery Partners (as relevant) prepared plans to comply with the approval requirements in the Incorporated Document. RPV and the Delivery Partners developed and implemented these management plans and programs in accordance with the processes detailed in the EMF.

3.2 Roles and Responsibilities

3.2.1 RAIL PROJECTS VICTORIA

RPV, on behalf of the Victorian Government, is responsible for delivering MTP in line with the requirements and objectives of DoT and the Victorian Government. RPV forms part of the MTIA, which is responsible for facilitating the development and delivery of the biggest transport infrastructure program in Victorian history.

The key roles and responsibilities of RPV for the MTP are set out in the EMF and include:

- Obtain applicable principal statutory approvals including the Planning Scheme Amendment (PSA), Cultural Heritage Management Plan (CHMP) and some heritage permits, where it is more appropriate for RPV to seek these consents.
- Establish the EMF, including the RIMG and the BSGC for approval by the Minister for Planning as required by the Incorporated Document.
- Establish the Urban Design Strategy (UDS) and the CSEMF for approval by the Minister for Planning, as required by the Incorporated Document and EPRs.
- Develop and implement the RPV EMS, in accordance with ISO 14001:2015.
- Monitor compliance with the EPRs across all Project Contracts and comply with the EPRs applicable to RPV.
- Together with each Delivery Partner for each of the Project Contracts, develop and submit the requisite plans to comply with the Incorporated Document and the EMF.
- Review and approve contract documentation for each Project Contract in accordance with the EMF, including the CEMPs, SEIPs, Transport Management Plans, Business Disruption Plans (BDPs) and Construction Noise and Vibration Management Plans (CNVMP) as required by the Incorporated Document.
- Review the CSEMF for each Project Contract.

- Prior to commencement of work, verify that the Delivery Partner has complied with the relevant EPRs.
- Review the Delivery Partner's performance against the approved EPRs and take corrective action as necessary.
- Commission the Independent Environmental Auditor to determine Delivery Partner compliance with the EMF, EPRs and relevant Delivery Partner Management.

3.2.2 DELIVERY PARTNERS

Construction of MTP is being delivered by RPV on behalf of the Victorian Government in partnerships with contracted Delivery Partners. The key roles and responsibilities of each Delivery Partner for the MTP are set out in the EMF and the contractual obligations and include:

- Comply with the EMF (including the EPRs, RIMG, BSGC and CSEMF), legislative and approval requirements.
- Obtain any additional permits from regulatory authorities (other than the approvals that would be obtained by or jointly with RPV).
- Develop and implement a project specific EMS or apply their existing EMS to the specific activities for the MTP, that is certified to ISO 14001:2015.
- Prepare a CEMP, SEIPs and associated work method statements (WMS), and other plans required by the Incorporated Document, EPRs or Project Contracts.
- Develop a CSEMP consistent with RPV's CSEMF approved by the Minister for Planning in accordance with EPR SC3.
- Provide adequate resources to establish, implement, maintain and improve the CEMP, SEIPs and the EMS.
- Implement and maintain compliance with the EPRs.
- Undertake environmental audits to confirm compliance with the EMF, EPRs and plans required by the Incorporated Document.
- Prior to commencement of work, ensure that all sub-contractors have complied with the relevant EPRs, CEMP and plans required to comply with the EPRs and Incorporated Document, where relevant.
- Review of sub-contractor's performance against the EPRs and CEMP and take corrective action as necessary.

3.2.3 INDEPENDENT ENVIRONMENTAL AUDITOR

The IEA undertakes environmental audits of compliance with plans required to comply with the EPRs and Incorporated Document prior to implementation, as well as during project activities, to verify compliance with the EMF, EPRs, environmental management plans and approval requirements. This also includes investigations into trends in complaints, by topic or on a random basis.

The key roles and responsibilities of the IEA during the Main Works Packages, as specified in the EMF, are:

- Prior to commencement of work, verify that the Delivery Partner has complied with the relevant EPRs, the EMF and the Incorporated Document, by reviewing management plans required by the EPRs.
- Conduct audits of the Delivery Partner's works to assess compliance with the CEMP, EMF, EPRs and plans required by the EPRs and Incorporated Document.
- Prepare audit reports containing the results of audits.
- Review complaints which may highlight instances of non-conformance with applicable EPRs.

4. Conduct of Audits

4.1 IEA Audit Requirements

RPV is responsible for engaging an IEA for each of the RIA and RSA contracts.

Table 4.1 presents the IEAs appointed by RPV. Given no works were completed for the Rail Systems Works Package during the scope of this report, there is no further commentary relevant to RSA.

TABLE 4.1: MAIN WORKS INDEPENDENT ENVIRONMENTAL AUDITORS

MAIN WORKS PACKAGE	DELIVERY PARTNER	IEA
Rail Infrastructure Works Package	Rail Infrastructure Alliance	KPMG
Rail Systems Works Package	Rail Systems Alliance	KPMG

Note that for future audits, RIA and RSA have merged to form RNA (Rail Network Alliance) and future reports will be under a different entity.

Audits of each Delivery Partner's CEMP, sub-plans and SEIPs were required prior to works commencing to confirm compliance with ISO 14001:2015, the EMF, relevant EPRs and Incorporated Document. Site audits were scheduled on a quarterly basis through the delivery of the Main Works Package and considered:

- The timing of works.
- The nature of the works including consideration of the level of associated risk.
- Incident investigation outcomes.
- Complaints received, particularly if related to EPRs and indicate instances of non-conformances.
- Previous audit outcomes.
- Management review outcomes: upon the completion of each audit, an audit report detailing all the findings was submitted to RPV.

4.2 IEA Audit Methodology

4.2.1 AUDIT OVERVIEW

The MTP EMF outlines the IEA responsibilities, including:

- Prior to commencement of work, verify that the contractor has complied with the relevant EPRs, the EMF and the Incorporated Document.
- Conduct audits of the contractor's works to assess compliance with the CEMP, EMF, EPRs and plans required by the EPRs and Incorporated Document.
- Prepare a six-monthly report summarising the Contractor's compliance with the EMF and provide to RPV and the Delivery Partner.
- Prepare audit reports containing the results of audits.
- Review complaints which may highlight instances of non-conformance with applicable EPRs.

4.2.2 AUDIT PROGRAM

Audits of the Delivery Partner's CEMP, sub-plans and SEIPs involved a review of each document to assess compliance with ISO 14001:2015, the EMF, relevant EPRs and Incorporated Document. During site inspections, compliance was assessed through observation of project activities, interviews and review of relevant environmental records.

The IEA carried out both pre-commencement (desktop audits - prior to commencement of works) and implementation audits (during construction) within the audit summary period. The audit schedule was developed so that the EPRs considered in each audit would be relevant to the construction activities at that time. Prior to each audit, key environmental aspects were identified in consultation with RPV, the Delivery Partner and RIA. The key environmental aspects were decided based on these discussions, taking into consideration previous findings and any relevant stakeholder engagement.

These key environmental aspects formed the scope for each environmental audit and broadly covered the documentation listed in Section 4.2.1.1 and the works listed in Section 4.2.1.2 and 4.2.2.3. During the course of the audit program KPMG followed up the status of findings of the previous reports until each finding was satisfied and closed.

4.2.2.1 Documentation

The MTP EMF required RIA to produce the following management plans and environmental documentation:

- CEMP and associated sub plans
- SEIP
- Air Quality Management Plan
- Ecology Management Plan
- Heritage Management Plan
- Surface Water Management Plan
- Spoil Management Plan
- Monitoring Management Plan
- Construction Noise & Vibration Management Plan
- Health and Safety Management Plan
- Tree Management Plan
- Traffic Management Plans
- Urban Design Management Plan
- Urban Ecology Management Plan
- Sustainability Management Plan
- BDP
- CSEMP
- Ground Movement Management Plan
- EMS Manual

- Other documentation (as required).

4.2.2.2 Works

The RIA works under GC82 are being undertaken in three key construction precincts: Western (Tunnel Entrance) Portal, Eastern (Tunnel Entrance) Portal and Western Turnback. Key activities being carried out by RIA under the Rail Infrastructure & Systems Package, include:

- Construction of concrete structures including approach, decline and cut and cover
- Structural steel works
- Services works, including power and drainage
- Road construction
- Landscaping
- Traffic management
- Cut and cover tunnelling
- Combined services route installation and relocation
- Signalling equipment installation
- Overhead wiring works
- Track works
- Construction of a third station platform West Footscray platform.

4.2.2.3 Complaints

Complaints are addressed during the course of the IEA Audits through auditing EPR SC4 Communications and Stakeholder Relations and how the delivery partner is implementing the complaints management process. Findings against this process may result in non-conformance if complaints are not being appropriately managed. Where there are no specific IEA findings against under the CEMP, complaints are being managed in accordance with the relevant plans.

4.2.3 AUDIT CLASSIFICATIONS

The IEA (KPMG) used different audit classifications during the relevant period that were attributable to the type of audit being carried out.

- Pre-commencement audits were documentation-based desktop audits, testing plans, sub-plans and other relevant documentation against selected EPRs. A compliance-based classification was agreed as the most suitable means of rating the findings.
- Implementation Audits were initially agreed to be based on risk levels to consider the relative potential impacts of non-compliances.

However, after initial Implementation Audits had been completed, it was decided that audit findings would be better suited as a compliance-based classification, which also better aligned to the purpose of the audits. This also allowed for consistency with the pre-commencement desktop audits and a direct comparison of findings.

The Audits from the 2020-2021 period were all Implementation Audits and followed the compliance-based classification system seen in Table 4.2.

TABLE 4.2: AUDIT CLASSIFICATIONS

FINDING	DESCRIPTION
Complies (C)	The response fully satisfies the requirement (being a requirement of a framework, standard or other guidance used to set the performance standard of the project).
Does Not Comply (DNC)	The response does not satisfy the requirement.
Partially complies (PC)	The response partially satisfies the requirement; is in progress to satisfy the requirement or is part of a demonstrated Sub-Plan or plan to satisfy the requirement.
Potential Improvement Opportunity (PIO)	Where in the course of the audit work, an opportunity has been identified to improve a process or procedure. A PIO is an opportunity to improve upon a process or procedure. It does not represent a non-compliance and therefore is not required to be addressed to achieve compliance. For this reason, there is no follow up required to close out PIOs.

5. Completed Audits

5.1 Implementation Audit Q1 2020

5.1.1 AUDIT SCOPE

The Implementation Audit conducted in Q1 2020 reviewed the compliance of RIA works against EPRs at the Eastern Portal, Western Portal, Eastern Corridor, Western Corridor and Western Turnback. This included confirmation that the RIA's management plans (including the CEMP and associated sub-management plans) complied with requirements.

EPRs reviewed within the scope of the Implementation Audit Q1 2020 were:

- Social and Community: SC1, SC4, SC6, SC10

The audit scope also incorporated the investigation of any open previous findings to update their status and close where appropriate.

5.1.1.1 Audit Findings

This section summarises the IEA findings relevant to the Q1 2020 IEA Report.

5.1.1.2 Does Not Comply

No findings raised as "Does Not Comply" during this audit.

5.1.1.3 Partially Complies

No findings raised as "Partially Complies" during this audit.

5.1.1.4 Potential Improvement Opportunity

PIO – EPR SC6

The IEA found that there was a misunderstanding of responsibility of onsite worker roles, different responses were provided by the Eastern and Western Portal teams in relation to RIA's responsibilities on communicating potential disruption to major public events. There is opportunity to update Section 2 of the Major Events Procedure to better clarify the specific roles and responsibilities of RIA and MTM in coordinating communications around major events. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

PIO – EPR SC6

The IEA reviewed the Major Events Procedure and noted the document included an approach to timely notifications regarding major public events. After subsequent interviews with relevant RIA staff the IEA noted that there is opportunity for RIA to improve the timely provision of construction schedules to the RIA Communication Relations Team for event planning to be improved. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

5.2 Implementation Audit Q2 2020

5.2.1 AUDIT SCOPE

The Implementation Audit conducted in Q2 2020 reviewed the compliance of RIA's works against EPRs at the Eastern Portal, Western Portal, Eastern Corridor and Western Turnback. Given the impacts of COVID-19 and the restrictions in place at the time, in place of undertaking site visits, this audit was instead conducted via Skype interviews. The EPRs reviewed within the scope of the Implementation Audit Q2 2020 were:

- Environmental Management Framework: EMF1, EMF2
- Aboriginal Culture Heritage: AH1
- Air Quality: AQ1, AQ2, AQ3

- Business: B2
- Contaminated Land and Spoil Management: C1, C2, C3,
- Noise and Vibration: NV1, NV3, NV4, NV6, NV17, NV 21
- Surface Water: SW1

The audit scope also incorporated the investigation of any open previous findings to update their status and close where appropriate.

5.2.2 AUDIT FINDINGS

This section summarises the IEA findings relevant to the Q2 2020 IEA Report.

5.2.2.1 Does Not Comply

Finding – EPR AQ2

RIA are required to develop and implement plan(s) for dust management and monitoring as well as minimising and monitoring the impact of construction dust (EPR AQ2). RIA has developed the Air Quality Management Plan (AQMP) which outlines controls to minimise dust and other emissions. Section 10 of the AQMP outlines controls to manage dust and other emissions, including AQM 6 which state speed limits need to be imposed on unsealed surfaces, to be outlined in the applicable Traffic Management Plan. However, subsequent reviews of the relevant Traffic Management Plans highlighted that there were no references to speed limits on unsealed roads. RIA agreed with the findings and took action to update their TMP and subsequent reports with the AQMP requirements.

The IEA received updated Traffic Management Plans from the RIA in September 2020 (Q3 2020 Audit) with speed limits imposed on unsealed surfaces and the finding was closed.

5.2.2.2 Partially Complies

Finding – EPR AQ2

RIA are required to develop and implement plan(s) for dust management and monitoring, as well as minimising and monitoring the impact of construction dust (EPR AQ2). RIA has developed the AQMP which outlines controls to minimise dust and other emissions. Section 10 of the AQMP outlines controls to manage dust and other emissions, including EPR AQM 8 which requires all vehicles and machinery to be serviced to manufacturer specifications and to have pre-start checklists and equipment maintenance logs completed on a regular schedule. RIA provided evidence of vehicle and machinery servicing to the manufacturer specifications. Review of pre-start checklists however indicated that some checklists had not yet been signed by the Supervisor and faults indicated on the checklists had subsequently not been resolved or closed out. RIA noted the findings and took action to raise the issue with Superintendents and to brief all workforce and Supervisors.

In July 2020 (Q3 2020 Audit) RIA confirmed that Project Wide Communications had taken place with communications highlighting the importance of completing plant pre-start checklists. The finding was subsequently closed.

5.2.2.3 Potential Improvement Opportunity

PIO – EMF2

A review of the management plans noted that there were inaccurate document finalisation dates on the cover page. As the review and approval process behind updating management plans between RIA and RPV take a significant amount of time, there is opportunity for RIA to update “Document Record” sections of the management plan to ensure that the date that the document review was finalised by RPV is included. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

5.3 Implementation Audit Q3 2020

5.3.1 AUDIT SCOPE

The Implementation Audit conducted in Q3 2020 reviewed the compliance of RIA’s works against EPRs at the Western Turnback, Western Portal and Eastern Portal. Given the impacts of COVID-19 and the restrictions in place

at the time, in place of undertaking site visits, this audit was instead conducted via Microsoft Teams interviews. The EPRs reviewed within the scope of the Implementation Audit Q3 2020 were:

- Arboriculture: AR4
- Ground Movement and Land Stability: GM2, GM3, GM 5, GM6

The audit scope also incorporated the investigation of any open previous findings to update their status and close where appropriate.

5.3.2 AUDIT FINDINGS

This section summarises the IEA findings relevant to the Q3 2020 IEA Report.

5.3.2.1 Does Not Comply

No findings raised as “Does Not Comply” during this audit.

5.3.2.2 Partially Complies

Finding – EPR GM5

RIA are required to adopt construction techniques that ensure potential ground movement impacts are limited to within appropriate acceptability criteria (EPR GM5). Generally, RIA has a consistent monitoring and reporting methodology to implement EPRs. However, responses to Amber/Red alerts did not align with the documented procedural response outlined in the RIA Monitoring Management Plan.

Instead, interviews with RIA Survey Managers highlighted that ground movement monitoring had progressed with the development and knowledge of the project. As such, each survey manager demonstrated insight into how data generated from ground movement monitoring instruments reflected site-specific operational and construction activities.

Survey Managers reported regular exceedances and triggers of Amber/Red alerts due largely to daily train activity and this site-specific knowledge allowed Survey Managers to avoid responding to each alert every time there is ground movement due to external sources. This however only partially complies with the EPR and creates a risk to other people on site as procedures implemented may only be known to the Survey Managers and their team.

In November 2021 (Q4 2021 Audit), RIA provided the updated Monitoring Management Plan which addressed the key person risk and better reflected the method used by RIA Survey Managers when performing ground movement monitoring. The finding was subsequently closed.

5.3.2.3 Potential Improvement Opportunity

PIO – GM6

A potential issue was found in delivery timeframes for post-condition surveys in line with the project timeline. Across the GC82, RIA had several pre-condition surveys completed but had only conducted a few post-condition surveys. There is opportunity for RIA to update the relevant documentation to provide assurance that timely and structured delivery of the outstanding post-condition surveys will occur. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

PIO – EPR GM5

A potential for improvement opportunity was identified in updating Trigger Action Response Plan (TARP) documents across GC82 sites. RIA have developed fit-for-purpose procedures set out in other management documents but not the TARP. There is opportunity for RIA to update documents to remove ambiguity around ground movement monitoring. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

5.4 Implementation Audit Q4 2020

5.4.1 AUDIT SCOPE

The Implementation Audit conducted in Q4 2020 reviewed the compliance of RIA's works against EPRs at the Western Corridor, Eastern Corridor, Western Portal and Eastern Portal. Given the impacts of COVID-19 and the restrictions in place at the time, in place of undertaking site visits, this audit was instead conducted via Microsoft Teams interviews. The EPRs reviewed within the scope of the Implementation Audit Q4 2020 were:

- Aquatic Ecology and River Health: AE2, AE3
- Environmental Management Framework: EMF2
- Groundwater: GW3, GW4
- Noise and Vibration: NV1, NV3, NV4, NV6, NV21
- Surface Water: SW2
- Transport: T2, T3, T4, T5

The audit scope also incorporated the investigation of any open previous findings to update their status and close where appropriate.

5.4.2 AUDIT FINDINGS

This section summarises the IEA findings relevant to the Q4 2020 IEA Report.

5.4.2.1 Does Not Comply

No findings raised as "Does Not Comply" during this audit.

5.4.2.2 Partially Complies

Finding – EPR T3

RIA is obliged to develop suitable measures to ensure that emergency service access is not inhibited because of construction work sites (EPR T3). RIA personnel demonstrated a sound understanding of Emergency Access requirements in line with the EPR.

However, the Worksite Traffic Management Plans (for the Eastern and Western Portals) did not include the Emergency Access Plans that documented these measures. This presents a risk that the Management Plans cannot be implemented in line with documented procedures. RIA noted this risk and actioned adding details of Emergency Access into the relevant Management plans.

In January 2021 (Q1 2021 Audit) RIA provided the updated Worksite Traffic Management Plans which included details of Emergency Access. The finding was subsequently closed.

5.4.2.3 Potential Improvement Opportunity

PIO – EPR NV4

RIA investigated a noise complaint in relation to an idling truck. RIA found that the truck had been idling because it had arrived earlier than the scheduled pick-up time. Whilst action was taken by RIA following the complaint, the IEA determined that the incident was still in breach of the EPR NV4.

RIA monitors traffic-related issues through implementation checklists with traffic crews. However, there is opportunity for RIA to revisit the effective implementation of internal control procedures to prevent truck idling from occurring in the future. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

PIO – EPR NV21

The IEA noted that the current Construction Noise and Vibration Impact Assessment (CNVIA) does not reflect the current noise, vibration and air quality monitoring locations at the Eastern or Western Portal or refer to documents that contain the current monitoring locations.

RIA has since provided the current list of existing noise and vibration monitoring locations at both portals, however there is opportunity for RIA to provide clarity over monitoring locations in the CNVIA by referencing the latest Eastern and Western Corridor Site Environmental Implementation Plans. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

5.5 Implementation Audit Q1 2021

5.5.1 AUDIT SCOPE

The Implementation Audit conducted in Q1 2021 reviewed the compliance of RIA's works against EPRs at the Western Portal and Eastern Portal. This audit was conducted as part of the regular implementation audit schedule outlined in the EMF and included a site visit (after easing of COVID restrictions). The EPRs reviewed within the scope of the Implementation Audit Q1 2021 were:

- Arboriculture: AR1, AR2
- Historical Cultural Heritage: CH1, CH4, CH6, CH7, CH11, CH23
- Groundwater: GW1, GW2
- Noise and Vibration: NV6, NV8, NV11, NV21
- Social and Community: SC1, SC4, SC6, SC10
- Traffic: T10

The audit scope also incorporated the investigation of any open previous findings to update their status and close where appropriate.

5.5.2 AUDIT FINDINGS

This section summarises the IEA findings relevant to the Q1 2021 IEA Report.

5.5.2.1 Does Not Comply

No findings raised as "Does Not Comply" during this audit.

5.5.2.2 Partially Complies

Finding – EPR SC1

RIA is obliged to reduce, as far as is practicable, the disruption to residents from direct acquisition or temporary occupation (EPR SC1). The IEA reviewed the Communications and Stakeholder Engagement Plan (SCEMP) and Business Disruption Plan (BDP) and noted that the plan was developed prior to the execution of the Project Alliance Agreement.

There has been ongoing consultation with impacted businesses, but it does not appear that the BDP has been updated since March 2019, despite significant consultation having occurred since this date. Additionally, the BDP contains incomplete references to sections, which affects the usability of the document. RIA agreed with this finding and actioned updating the BDP.

In August 2021 (Q3 2021 Audit) RIA provided the updated BDP. The finding was subsequently closed.

5.5.2.3 Potential Improvement Opportunity

PIO – EPR NV6, NV8, NV11, NV21

The IEA reviewed several noise mitigation EPRs RIA had in place. The monitoring and investigations into noise and vibration complaints were appropriate, but there is opportunity for RIA to place a higher level of analysis and scrutiny on the noise and monitoring data captured in order to identify specific activities that cause or potentially cause elevated noise and/or vibration levels close to management thresholds.

RIA has been undertaking investigations into noise and vibration complaints raised to retrospectively investigate opportunities for mitigation or improvement. Relocating sensitive receptors is an effective method to mitigate noise and vibration exposure. It is recommended that RIA take a more proactive approach to identify and manage those construction activities that can expose sensitive receptors to elevated noise and or vibration impacts, rather than

relying on complaints from residents at sensitive receptor locations. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

5.6 Implementation Audit Q2 2021

5.6.1 AUDIT SCOPE

The Implementation Audit conducted in Q2 2021 reviewed the compliance of RIA's works against EPRs at the Western Portal, Eastern Portal and Western Turnback. This audit was conducted as part of the regular implementation audit schedule outlined in the EMF and included a desktop review of documentation and interviews with relevant RIA personnel. The EPRs reviewed within the scope of the Implementation Audit Q2 2021 were:

- Aboriginal Cultural Heritage: AH1
- Air Quality: AQ1, AQ2, AQ3
- Business: B2
- Contaminated Land and Spoil Management: C1, C2, C3
- Environmental Management Framework: EMF1, EMF2
- Noise and Vibration: NV1, NV3, NV4, NV6, NV17, NV21
- Surface water: SW1

The audit scope also incorporated the investigation of any open previous findings to update their status and close where appropriate.

5.6.2 AUDIT FINDINGS

This section summarises the IEA findings relevant to the Q2 2021 IEA Report.

5.6.2.1 Does Not Comply

No findings raised as "Does Not Comply" during this audit.

5.6.2.2 Partially Complies

No findings raised as "Partially Complies" during this audit.

5.6.2.3 Potential Improvement Opportunity

PIO – EPR NV21

The IEA noted that two noise complaints were received from stakeholders near the Western Portal related to construction works. The RIA investigated and found the complaints were related to MTM construction activities. The Stakeholder Engagement Team then contacted the complainants and advised them an investigation had been undertaken and then closed the complaint in their management system (DARZIN).

The IEA then noted that the Stakeholder Engagement Team did not inform MTM of the complaints received. There is opportunity for the Stakeholder Engagement Team to inform MTM of all complaints that are related to MTM construction activities. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

PIO – Various EPRs

The IEA noted that the Environment Protection Authority (EPA) Victoria introduced a new Civil Construction, Building and Demolition Guide in November 2020. This guide supports civil construction, building and demolition industries to eliminate or reduce the risk of harm to human health and the environment through good environmental practice.

At the time of the July 2021 audit, it was evident that RIA's management plans and documentation still referenced previous EPA guidelines. There is opportunity for RIA to update the documentation and management plan references to the current EPA guidelines. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

5.7 Implementation Audit Q3 2021

5.7.1 AUDIT SCOPE

The Implementation Audit conducted in Q3 2021 reviewed the compliance of RIA's works against EPRs at the Western Portal, Eastern Portal and Western Turnback. This audit was conducted as part of the regular implementation audit schedule outlined in the EMF and included a desktop review of documentation and interviews with relevant RIA personnel. The EPRs reviewed within the scope of the Implementation Audit Q3 2021 were:

- Land Use and Planning: LU2, LU4
- Landscape and Visual: LV1, LV2, LV3, LV4
- Noise and Vibration: NV4

The audit scope also incorporated the investigation of any open previous findings to update their status and close where appropriate.

5.7.2 AUDIT FINDINGS

This section summarises the IEA findings relevant to the Q3 2021 IEA Report.

5.7.2.1 Does Not Comply

No findings raised as "Does Not Comply" during this audit.

5.7.2.2 Partially Complies

No findings raised as "Partially Complies" during this audit.

5.7.2.3 Potential Improvement Opportunity

PIO – EPR LV2

The IEA reviewed communications between RIA and the City of Stonnington that confirmed a City of Stonnington asset (a water fountain) would not need to be returned. The IEA also noted that there was no documentation, such as a register of items to be stored, reinstated, or replicated, from RIA.

There is a potential improvement opportunity to create a register to track City of Stonnington assets. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

5.8 Implementation Audit Q4 2021

5.8.1 AUDIT SCOPE

The Implementation Audit conducted in Q4 2021 reviewed the compliance of RIA's works against EPRs at the Western Portal, Eastern Portal and Western Turnback. This audit was conducted as part of the regular implementation audit schedule outlined in the EMF and included a desktop review of documentation and interviews with relevant RIA personnel. The EPRs reviewed within the scope of the Implementation Audit Q4 2021 were:

- Aquatic Ecology and River Health: AE1, AE2, AE3, AE7
- Surface Water: SW2
- Traffic: T3

The audit scope also incorporated the investigation of any open previous findings to update their status and close where appropriate.

5.8.2 AUDIT FINDINGS

This section summarises the IEA findings relevant to the Q4 2021 IEA Report.

5.8.2.1 Does Not Comply

No findings raised as “Does Not Comply” during this audit.

5.8.2.2 Partially Complies

No findings raised as “Partially Complies” during this audit.

5.8.2.3 Potential Improvement Opportunity

PIO – EPR GM5

The IEA followed up an outstanding finding from the RIA Q3 2020 implementation audit where ground movement action taken by the RIA Team in response to red and/or amber alerts did not align with the documented procedural response outlined within the RIA Monitoring Management Plan. The RIA was required to update the Monitoring Management Plan to align documented procedures with the matured ground movement process undertaken by RIA Survey Managers.

The IEA noted that on the “Document Record” the updates were initiated 10 months after the finding was raised and approved/issued for use approximately 13 months after the finding was raised. While there is a review process that needs to take place before updating documents, there is opportunity for RIA to reduce the length of time taken to initiate changes in order to update documents and issue them for use in a timely manner. The IEA does not require RIA to close-out PIOs, and therefore no follow-up was required.

6. Conclusions

The auditing programme identified that, in general, the Rail Infrastructure Package being delivered by RIA and summarised within this report was undertaken in accordance with the requirements of EMF, relevant EPRs and the Incorporated Document. The auditing process is designed to lead to continual improvement during projects - this is key to implementing best practice ISO14001 environmental management systems.

In the previous IEA summary report (MMR-AJM-PWAA-RP-NN-005117) for 2018 and 2019 there was a downward trend for findings of greater environmental significance/ risk (i.e. Does Not Comply findings). This trend continued in this reporting period with only one “Does not Comply” finding being raised in the reporting period.

In summary RIA were generally compliant with their environmental obligations under the requirements of GC82 and where potential non-compliance was raised, RIA responded in order to address any issues/environmental harm. All findings (Does not Comply and Partially Complies) identified by the IEA were typically addressed by RIA in a timely manner with the associated level of environmental risk. This highlights the project’s overall improvements in compliance and the continued commitment to the continual improvement principle.

This summary report relates to the Main Works Package of the MTP RIA Works Package from start of 2020 until the end of 2021. Further summaries of key findings and recommended actions from future IEA reports produced for the remaining works packages of the MTP will be prepared and published on the project’s official [website](#).



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