

# WEST GATE TUNNEL PROJECT

Independent Reviewer and Environmental Auditor  
Final Report for Submission to the Minister for Planning –  
September 2020 to February 2021

# WEST GATE TUNNEL PROJECT

## Independent Reviewer & Environmental Auditor

Final Audit Report for Minister of Planning

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## EXECUTIVE SUMMARY

### Introduction

This report summarises the environmental audit findings of the Independent Reviewer and Environmental Auditor (IREA) for the West Gate Tunnel Project (the Project) in Melbourne, Victoria. It covers the six-monthly audit of the Environmental Management Strategy (the Strategy), quarterly Construction Environmental Management Plan (CEMP) audits, and monthly audits of the Worksite Environmental Management Plans (WEMP) which occurred during the construction period from September 2020 to February 2021.

This is the sixth IREA Minister's Report, which is required to be issued every six months to the Victorian Minister for Planning and made available to the public on the Project website.

Construction on the Project has been underway since March 2018. Recent activities have been concentrated on the widening of the West Gate Freeway, preparing to launch the tunnel boring machines and substructure works for the various bridges along the eastern portion of the Project.

During the COVID-19 pandemic state of emergency, which started in March 2020, construction has continued and the IREA has completed all of the required environmental audits and continued surveillance following the IREA COVIDSafe work practices and protocols in line with prevailing Victorian Government health advice.

### Overview of Findings

Overall, Project Co was found to be meeting their obligations under the Strategy. No adverse findings were raised with Project Co during the Strategy audit.

Project Co / D&C Subcontractor is generally compliant with the Environmental Performance Requirements (EPR).

During this reporting period the IREA approved three revised environmental management plans, including the Soil and Spoil Management Plan (SSMP), Air Quality Management Plan (AQMP), and Ground Movement Management Plan (GMMP). The approval of the revised SSMP and GMMP facilitated close-out of previous audit findings, including one non-conformance. The SSMP was approved by the IREA and the State, and it was sent to the Victorian Environment Protection Authority (EPA) for comment, to ensure the document is developed to the satisfaction of the EPA.

The IREA's future auditing program will continue to focus on how Project Co and the D&C Subcontractor demonstrate compliance with Project environmental requirements. Project Co and the D&C Subcontractor have continued to provide evidence to close out audit findings with eight CEMP findings (one non-conformance and seven opportunities for improvement) and 24 WEMP findings (two non-conformances and 22 opportunities for improvement) closed out since the previous reporting period.

A summary of the findings raised during this reporting period is below.

### Environmental Management Strategy

Project Co is generally meeting their obligations under the Strategy. No adverse findings were raised during this reporting period.

No findings remain open from previous reporting periods.

These findings are detailed further in Section 3.1 of the report.

### Environmental Performance Requirements

During the last six-month reporting period the IREA formally audited 45 EPRs. The majority of EPRs audited during the reporting period were deemed compliant. The findings raised consisted of:

- No non-conformances.
- Three opportunities for improvement. These related to business, contaminated soil and spoil, and groundwater management.

- Four observations were also raised.

Two non-conformances and five opportunities for improvement from previous reporting periods were closed. In total there are 16 findings remaining open at the end of this reporting period, comprising no non-conformances and 16 opportunities for improvement.

A full list of EPR findings raised and the status of previous findings is detailed in Section 3.2. Also refer to Appendix A for a summary of EPR compliance status and the upcoming EPR auditing schedule.

### **Construction Environmental Management Plan**

The last six-month reporting period focused on auditing a range of CEMP elements and subplans.

The CEMP audit findings for the November 2020 quarterly audit are summarised below:

- No non-conformances were raised during this audit.
- Four opportunities for improvement were raised during this audit. This included two against the Lighting Management Plan and two against the Soil and Spoil Management Plan. These generally related to documented evidence not provided.
- Six observations were also raised.

The CEMP audit findings for the February 2021 quarterly audit are summarised below:

- No non-conformances were raised during this audit.
- Two opportunities for improvement was raised against the CEMP relating to environmental emergency response drills and documented evidence not provided.
- Four observations were also raised.

One non-conformance and four opportunities for improvement from previous reporting periods were closed. In total there are 14 findings remaining open at the end of this reporting period, comprising one non-conformance and 13 opportunities for improvement. The IREA will continue to work with Project Co / D&C Subcontractor to close out any outstanding findings.

Details of the CEMP findings are listed in Section 3.3.

### **Worksite Environment Management Plans**

During the reporting period six WEMP audits were conducted. A total of 34 findings were raised in this reporting period. These consisted of:

- Two non-conformances.
- 18 opportunities for improvement.
- 14 observations.

The D&C Subcontractor has improved their system of reporting, communicating, and closing out WEMP audit findings to the IREA across all zones and has improved their closure of WEMP findings. Two non-conformances and 22 opportunities for improvement were closed during this reporting period. In total there are 20 WEMP audit findings remaining open, comprising two non-conformances and 18 opportunities for improvement. All findings raised between March 2018 and October 2019 were closed.

The WEMP findings are further detailed in Section 3.4.

### **Conclusions**

The findings arising from the reporting period by the IREA have not identified any immediate significant or material risks to the environment.

Implementation of the EPRs was found to be generally compliant, with no non-conformances and three opportunities for improvement during the reporting period.

Audit findings during the period relate to a range of matters, mostly specific to on-site matters, including:

- Reapproval of the Soil and Spoil Management Plan following comments by the EPA.



## West Gate Tunnel Project

- Assessment of environmental aspects such as noise and dust generation.
- Development and implementation of management actions.

There has been improvement in closing out audit findings. It is noted that a number of the audit findings from previous reporting periods remain open.

## GLOSSARY OF TERMS & ABBREVIATIONS

AQMP	Air Quality Management Plan
BIP	Business Improvement Plan
BOM	Bureau of Meteorology
CPBJH	Design and Construction Subcontractor (D&C Subcontractor)
CEMP	Construction Environmental Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CD	Certified Design
CHMP	Cultural Heritage Management Plan
CSM	Conceptual Site Model
EES	Environment Effects Statement
EMF	Environmental Management Framework
EMP	Energy Management Plan
EMS	Environmental Management Strategy
EPR	Environmental Performance Requirements
FFMP	Flora and Fauna Management Plan
GHG	Greenhouse Gas
GMMP	Ground Movement Management Pan
GWMP	Groundwater Management Plan
HMP	Heritage Management Plan
HSMP	Hazardous Substances Management Plan
HPAMP	Historic Places and Archaeological Management Plan
IREA	Independent Reviewer and Environmental Auditor
ISCA	Infrastructure Sustainability Council Australia
LMP	Lighting Management Plan
JASANZ	Joint Accreditation System of Australia and New Zealand
NML	Noise Management Levels
NYMS	North Yarra Main Sewer
PPP	Public Private Partnership
PSA	Planning Scheme Amendment
PSR	Project Scope & Requirements (Project Agreement or Contract)
SAQPs	Sampling Analysis and Quality Plans
SEPP	State Environment Protection Policy
SSMP	Soil and Spoil Management Plan
TBM	Tunnel boring machine
WEMP	Worksite Environment Management Plan
WGTP MTIA	West Gate Tunnel Project Major Transport Infrastructure Authority (the State)
WMP	Water Management Plan
WstMP	Waste Management Plan

# 1 INTRODUCTION

## 1.1 Purpose of this Report

This report summarises the Independent Reviewer and Environmental Auditor (IREA) audit findings from the sixth six-month period of construction of the West Gate Tunnel Project (the Project) in Melbourne, Victoria.

The IREA has been jointly appointed by West Gate Tunnel Project, Major Transport Infrastructure Authority (WGTP MTIA) and Transurban WGT Co Pty (Project Co) to provide independent oversight of design engineering, construction, program and environmental performance of the Project. The IREA undertakes audits, review of documentation and site surveillance of Project activities to assess whether conformance with Project requirements is being achieved. This includes the Environmental Performance Requirements (EPR) issued by the Minister for Planning in December 2017.

During the reporting period the IREA audited Project Co (responsible for delivering the Project and future operator of the road) to determine conformance with the Environmental Management Strategy (the Strategy). Similarly, the IREA has audited the CPB John Holland Joint Venture (D&C Subcontractor) to determine conformance with the Construction Environmental Management Plan (CEMP), EPRs, and Worksite Environment Management Plans (WEMP).

Prior to starting construction, the IREA reviewed the Strategy and approved the CEMP (and associated subplans). The WEMPs are approved by Project Co. The audits considered in this report are identified under the Project's EPRs (specifically EMP3) required by the Project's Planning Scheme Amendment (PSA) (GC93) and the Project Agreement between the State of Victoria (represented by WGTP MTIA) and Project Co.

The IREA is required to provide a six monthly "audit report" for submission to the Minister for Planning which must be made available to the public (this report).

## 1.2 Project Background

### 1.2.1 West Gate Tunnel Project

On 11 December 2017, the Victorian State Government (the State), as part of a Public Private Partnership (PPP), entered into contracts with Project Co for the construction and operation of the Project.

Project Co is responsible for the design, partial financing, construction, tolling, operation and maintenance of the Project. Project Co has ultimate responsibility to the State for delivering the Project to the requirements in the contract and for ensuring the D&C Subcontractor fulfils their obligations including the EPRs.

The D&C Subcontractor has been contracted to complete the detailed design and construction of the Project.

The WGTP MTIA is an administrative office established to manage the delivery of the Project in accordance with the contracts on behalf of the State Government. The Project has three components:

1. West Gate Freeway – upgrade and widening works between the M80 Ring Road interchange and Princes Freeway to the southern portals of the tunnels, including connections to Grieve Parade, Millers Road, Williamstown Road, Hyde Street, and the West Gate Bridge.
2. Twin tunnels – two tunnels, one inbound and one outbound, under Yarraville catering for three lanes between the southern and northern portals and connecting to the new bridge over the Maribyrnong River. The outbound tunnel will be approximately 4.0 kilometres long and the inbound tunnel will be approximately 2.8 kilometres long. A tunnel ventilation structure will be located at each exit portal.
3. Port, CityLink, and city connections – connects from the northern tunnel portal to the central city and includes the Maribyrnong River crossing, connections to the Port of Melbourne, elevated roads along Footscray Road, and connections to CityLink and the north west of the central city. Connections are also provided to both sides of the Port of Melbourne via MacKenzie Road and Appleton Dock Road. A widened Wurundjeri Way is connected to Dynon Road.

Early (preparatory) works started in December 2017 in preparation for construction. This included for instance, low environmental impact works such as completion of environmental surveys and investigations required prior to construction start. The Project started full construction in March 2018 on approval of the CEMP. Details on the construction progress over the audit period are described in Section 2.3.1

A publicly accessible Project Information Centre located on Whitehall Street in Yarraville (known as the Pivot site) is usually open to the public. Based on current health advice from the Australian Government Department of Health and Human Services to introduce social distancing measures, the Project Information Centre has been closed. There are a number of ways the public can still engage with the Project, including:

- Visiting the Project website at <http://westgatetunnelproject.vic.gov.au/>
- Contacting the Project through social media channels
- Contacting the Project call centre on 1800 105 105 or email [info@wgta.vic.gov.au](mailto:info@wgta.vic.gov.au).

## 1.2.2 Planning and Environment Approvals

The Project was declared 'public works' under the *Environment Effects Act 1978* in December 2015, requiring the preparation of an Environment Effects Statement (EES) to inform the Minister for Planning's assessment of the environmental effects of the Project. The EES was publicly exhibited in late May 2017 and public hearings undertaken between mid-August and late September 2017. The Minister for Planning publicly released his Assessment on 27 November 2017 to complete the EES process – concluding that the Project would deliver substantial transport and related benefits.

Three key (primary) approvals have been granted for the Project under Victorian legislation, including:

- Planning Scheme Amendment (PSA) and Incorporated Document issued by the Victorian Minister for Planning requires the project to be constructed and operated according to the Minister's requirements. The Minister approved the project under PSA GC65 on 7 December 2017. This PSA was revoked by Parliament on 7 March 2018 and remade with PSA GC93 on 8 March 2018. The PSA has been incorporated into six separate local Planning Schemes: Brimbank, Hobsons Bay, Maribyrnong, (City of) Melbourne, Port of Melbourne and Wyndham.
- Works Approval issued by the Victorian Environment Protection Authority (EPA) for design and construction of the tunnel ventilation structures.
- Cultural Heritage Management Plan (CHMP) 14562 issued by Aboriginal Victoria for works potentially affecting known and potential areas of Aboriginal Cultural Heritage Significance. CHMP 14562 was amended on 4 April 2018 and 28 February 2020.

These approvals include a range of obligations and conditions, including the PSA which requires the Project to be carried out in accordance with the approved "*West Gate Tunnel Project Environmental Performance Requirements, December 2017*". The EPRs define the project-wide environmental outcomes that must be achieved during design, construction and operation of the Project (refer Appendix A for a summary list of these EPRs and the Project website for a full version -

<http://westgatetunnelproject.vic.gov.au/about/keytopics/planning-approvals>).

The Environmental Management EPRs set out the following requirements:

- EPR EMP1 requires the preparation of an Environmental Management Strategy (the Strategy) to provide an overarching framework to address environmental requirements including relevant environmental laws, key approvals, approval conditions and the EPRs.
- EPR EMP2 requires the preparation and implementation of a CEMP, Worksite Environmental Management Plan (WEMP), Operational Environmental Management Plan (OEMP) and other plans as required by the EPRs in accordance with the Strategy.
- EPR EMP3 requires the appointment of an Independent Reviewer and Environmental Auditor (the IREA) to ensure compliance with the Strategy and EPRs and conduct compliance audits of the approved Strategy, CEMP and WEMPs. The WGTP MTIA must forward the audit reports to the Minister for Planning and other approval agencies as appropriate.

The EPRs set standards for the Project and are put in place to mitigate any adverse local effects of the Project on people and the environment. The EPRs have been incorporated into the Project Agreement between the State and Project Co and are included in the subcontract between Project Co and the D&C Subcontractor.

The relationship between the various Project parties and key planning and environment documents, including the Strategy, are summarised in Figure 1 below. This diagram shows the role of the Minister for Planning and other regulatory authorities in issuing approvals for the Project while continuing their role as regulator (blue boxes). These requirements, which include regulatory approvals and EPRs, are then incorporated into a series of Project Agreements (contracts) between WGTP MTIA (representing the State of Victoria), Project Co, and the D&C Subcontractor. Project Co delegate the direct responsibility for delivering these environmental requirements to the D&C Subcontractor via the Strategy.

The Strategy lists the Project environmental requirements and minimum requirements for both Project Co and the D&C Subcontractor. In the case of the D&C Subcontractor, this includes the requirements to develop environmental documentation such as a CEMP which outlines how environmental requirements will be met during design and construction, and WEMPs, which are used on the construction site as a practical guide to manage environmental issues. The D&C Subcontractor is also required to maintain an Environmental Management System that complies with the international standard ISO14001 Environmental Management Systems. This requires the D&C Subcontractor to develop and maintain various management systems, procedures and processes that facilitate continual improvements in environmental management.

The responsibility of WGTP MTIA, Project Co and the D&C Subcontractor for delivery of the environmental management framework is summarised in Figure 2. The figure also shows how environmental requirements are incorporated into design and construction documentation. Project Co is responsible for the preparation and implementation of the Strategy in accordance with EPR EMP1. The obligation for the preparation and implementation of the CEMP (including subplans), WEMP and any other project plans required to achieve the EPRs is the responsibility of the D&C Subcontractor. Design and construction documentation is prepared by the D&C Subcontractor in accordance with relevant environmental requirements and EPRs.

Construction on the Project commenced in March 2018 following the approval of the Strategy by the Minister for Planning and the CEMP (and subplans) by the IREA and WGTP MTIA. Further information on the Strategy, CEMP, WEMP, and the audit and review processes is provided in the following sections.

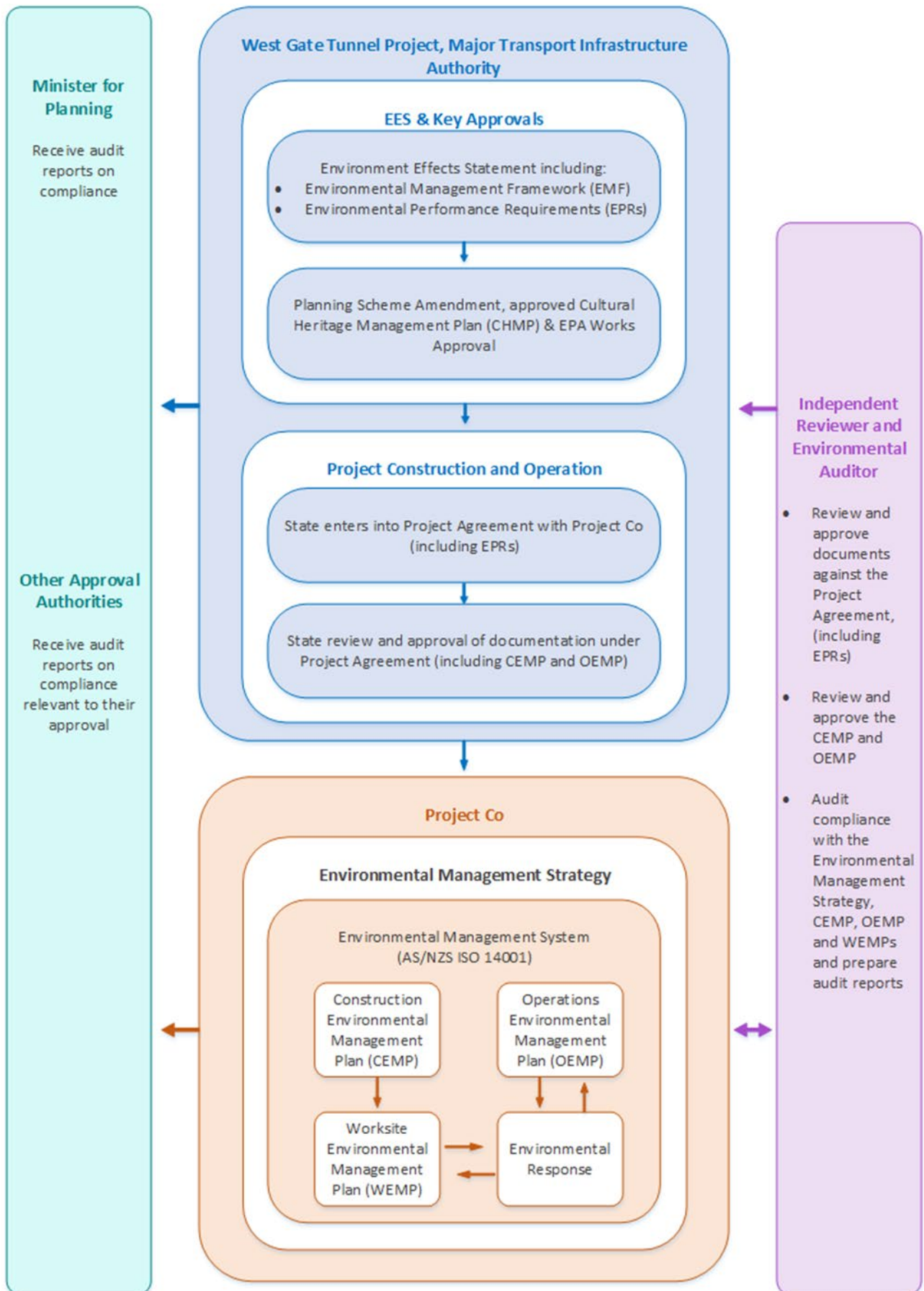


Figure 1 – Governance Framework for the Project Environmental Management Strategy (adapted from Strategy 2018)

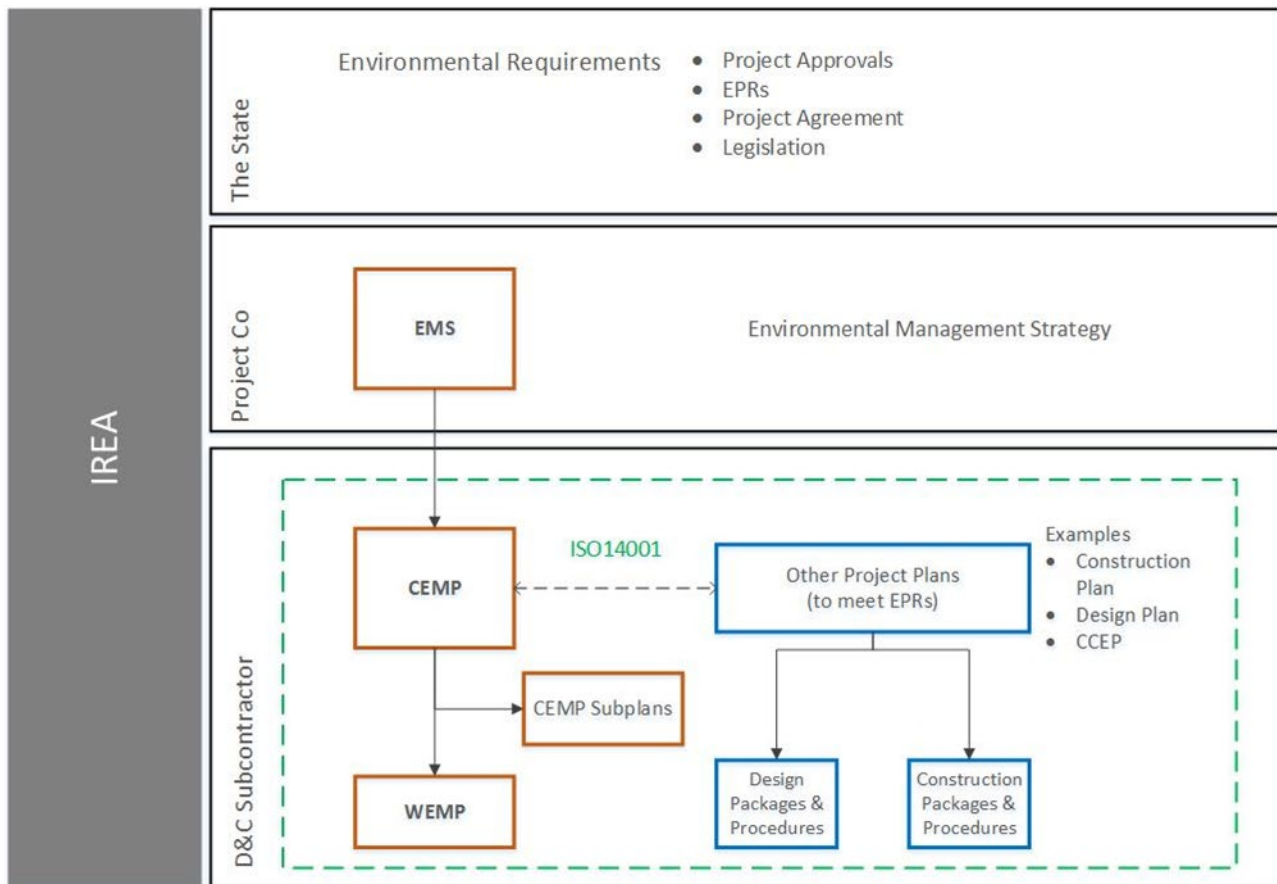


Figure 2 – Relationship between environmental management framework and Project design and construction documentation

### 1.2.3 Environmental Management Strategy

The Strategy provides an overarching framework to address all environmental requirements and manage environmental outcomes for the Project. Project Co is responsible for ensuring compliance with the Strategy which sets out the framework for delivering and complying with the EPRs, CEMP and other environmental requirements.

The Strategy was developed in early 2018, finalised on 31 January 2018, and approved by the Minister for Planning on 20 February 2018 (under PSA GC65). It was prepared in consultation with councils and other key stakeholders and reviewed by the IREA. PSA GC65 was revoked by the Parliament of Victoria on 7 March 2018, a new PSA (PSA GC93) was approved by the Minister for Planning, including re-approval of the Strategy by the Minister for Planning on 8 March 2018 in exactly the same form.

The Strategy outlines the Project's overall Environmental Management System, including responsibilities shared by the WGTP MTIA, Project Co, and the D&C Subcontractor. The Strategy is consistent with the Australian Standard for Environmental Management Systems (AS/NZ ISO 14001), which includes, but is not limited to project legal requirements, environmental management documents, roles and responsibilities, communication requirements, reporting, auditing, and processes for evaluating compliance. It is designed to provide an overarching framework to address the EPRs, which are largely delegated to the D&C Subcontractor to deliver (via the CEMP and Design Management Plans).



## 1.2.4 Construction Environmental Management Plan

The D&C Subcontractor's CEMP and subplans were developed in March 2018 and approved by the IREA and WGTP MTIA for implementation. The CEMP outlines how the D&C Subcontractor will achieve the environmental requirements for the construction phase of the Project. This includes requirements outlined under the legislation (including permits and approvals), the Project EPRs, and requirements set out under the Project Agreement. The CEMP includes control measures for implementation during construction in order to manage, minimise or avoid environmental impacts in carrying out construction activities. The subplans listed in Table 1 have also been developed to manage environmental risk associated with D&C Subcontractor activities and to address the requirements of EPRs.

As noted below, EPA comments on Revision 12 of the Soil and Spoil Management Plan have been received by the D&C Subcontractor and are in the process of being reviewed and addressed. As per EPR CSP2 this subplan needs to be to the satisfaction of EPA.

*Table 1 – Status of CEMP and subplans<sup>1</sup>*

Plan	Update status
Construction Environmental Management Plan Rev 10 – 21 January 2020	Rev 11 - under review
Water Management Plan Rev 10 – 12 December 2019	current
Flora and Fauna Management Plan Rev 12 – 12 December 2019	Rev 14 - under review
Construction Noise and Vibration Management Plan Rev 10 – 23 March 2020	current
Groundwater Management Plan Rev 11 – 23 March 2020	current
Heritage Management Plan Rev 8 – 30 June 2020	Rev 9 – under review
Waste Management Plan Rev 11 – 30 June 2020	current
Energy Management Plan Rev 11 – 30 June 2020	Rev 12 – under review
Hazardous Substances Management Plan Rev 10 – 30 June 2020	current
Lighting Management Plan Rev 11 – 30 June 2020	Rev 12 - under review
Soil and Spoil Management Plan Rev 12 – 29 September 2020	Rev 12 – EPA comments are being addressed by the D&C Subcontractor
Air Quality Management Plan Rev 10 – 9 October 2020	current
Ground Movement Management Plan Rev 9 – 9 October 2020	current
Tree Management Plan *	Rev A – under review

\* Tree Management Plan was previously an appendix of the Flora and Fauna Management Plan (Revision 8)

These sub plans do not address the entire scope of all EPRs for the Project. The CEMP makes reference to a suite of other management plans which are required to demonstrate how these and other EPRs will be complied with e.g. Interface Management Plan, Business Involvement Plan, Design Management Plan, Construction Management Plan, Communications and Community Engagement Plan (CCEP), Construction

<sup>1</sup> Subplan revision dates listed in the left-hand column are the date when the plan was approved by the State (with the IREA having already approved the plan).



Communications and Community Engagement Plan (CCCEP). The CEMP (and auditing process) is the main framework document used to audit conformance with the Project EPRs (noting it delegates these requirements to other parts of the D&C Subcontractor Management Systems).

## **1.2.5 Worksite Environmental Management Plans**

The D&C Subcontractor's WEMPs are prepared in order to manage discrete construction stages or work packages (by type) that may have an adverse impact on the environment. The WEMPs are subsidiary to the CEMP and are implemented at specific worksites to minimise potential impacts of construction activities on the environment and community. Each WEMP will include a map showing the location and scope of works to be managed and include environmental management measures (controls) required to be implemented. The WEMPs are for use by site personnel, consultants, and subcontractors, and a copy of the relevant WEMP is to be displayed at each site compound. Some EPRs require engagement with regulators (including Councils) where it is considered appropriate e.g. when Council land is affected.

## **1.3 Role of the IREA**

The IREA was jointly appointed by WGTP MTIA and Project Co on 30 May 2017 to provide independent oversight of design engineering, construction, and environmental performance of the Project. The IREA undertakes audits and surveillance of Project activities to assess whether compliance with the Project Documents is being achieved. This includes EPR EMP3 which requires the IREA to complete environmental audits of conformance with the approved Strategy (six-monthly), CEMP (quarterly) and WEMPs (monthly).

The IREA started work on the Project in late 2017, through review of design and construction packages associated with "early works" (limited to low impact investigations and site set up), site surveillance of early works, and reviews of draft environmental management documentation.

Following Financial Close and the issuing of key approvals, the IREA and WGTP MTIA approved the CEMP (including subplans) prior to construction starting in March 2018. The IREA and WGTP MTIA are also responsible for reviewing subsequent revisions of the CEMP and subplans.

With construction well underway, the IREA is responsible for undertaking a number of activities, described in the following sections.

### **1.3.1 Regular Site Inspections / Surveillance**

The IREA undertakes regular inspections of the construction site (at least daily). IREA representatives are based on site in each of the three construction zones – tunnels, east, and west. The surveillance process is not the same as a formal audit as it may only address (in one inspection) part of an EPR. This information is made available to the D&C Subcontractor and summarised in monthly reports by the IREA. This surveillance assists the IREA in identifying key issues and risks which is used to inform future surveillance and auditing effort. These inspections are designated by "CS" in Appendix A, which summarises the activities that the IREA has undertaken over the last six months in relation to checking compliance with the EPRs. This shows that while not every EPR is formally "audited" by the IREA every day, it is subject to regular surveillance.

### **1.3.2 Design and Construction Documentation Review**

The IREA reviews all design and construction packages (designated "DR" and "CR" in Appendix A). This includes, but is not limited to, reviews of documents such as design drawings, technical information packages, design packages (outlining the basis of design), construction packages, and construction procedures. These documents are reviewed by one or more representatives of the IREA considered a specialist in their field e.g. hydrogeologist, bridge engineer, ecologist. The IREA reviews these documents against all Project environmental requirements. These reviews are sent to all Project parties for consideration and action (by the D&C Subcontractor). The IREA is required to certify design packages which means that these are not signed off until the environmental requirements are addressed. Construction packages are reviewed by the IREA and checked for compliance on site during site surveillance (refer Section 1.3.1). The outcomes of these reviews do not represent a formal audit but can provide (in part or in full) inputs into the quarterly CEMP audit which is the formal mechanism for auditing and reporting on EPR conformance.

### 1.3.3 Management Plan Review

The IREA is responsible for reviewing and/or approving management plans and documentation (designated “MP” in Appendix A). In approving the CEMP and subplans required prior to construction start (in March 2018), the IREA has checked compliance with the EPR linked to these CEMP subplans. Though not a formal audit, these reviews are documented in the EPR compliance table in Appendix A as they go some way to demonstrating conformance. The IREA has also reviewed a number of other plans that do not necessarily need to be included in the CEMP but remain a requirement of the EPR, such as the CCEP. The review process for these plans is similar to the process used for design and construction packages, whereby the IREA’s comments are documented and the D&C Subcontractor is obliged to address these in subsequent revisions of the plan before it is issued for use.

Revised versions of the CEMP and subplans were reissued to all project parties in this audit period and the previous auditing period for review and approval. The CEMP and subplans have been approved by the project parties (refer Table 1).

EPR EMP3 requires formal auditing of the Strategy, the CEMP, and WEMPs (refer Section 2 for further detail on the conduct and scope of auditing). Audits of the CEMP and EPRs are undertaken every quarter (identified under the “Audit” columns in Appendix A). The IREA’s indicative 12-month EPR audit schedule is included in Appendix A. Through this program all applicable EPRs are audited at least once over a twelve-month period via the quarterly CEMP audits.

### 1.3.4 Minister’s Report

The IREA in its role as independent auditor is responsible for preparing a summary audit report which WGTP MTIA must forward to the Minister for Planning during construction and other approval authorities as appropriate. This audit report draws from audits undertaken over a six-month period, in this case the (sixth) six months of construction between September 2020 - February 2021. The formal audits described in this Minister’s Report have been undertaken by the IREA Lead Environment Auditor, Hilary Chapman and Assistant Environment Auditors, Camilla Freestone, Karen Kataguiru and Farzeen Khundkar. The Lead Auditor was supported by a team of specialists listed in Appendix B.

## 1.4 Report Structure

This report is divided into the following sections:

- Section 2: Conduct of Audits – details the scope of the IREA’s audit activities undertaken prior to, during and after the audit.
- Section 3: Audit findings – provides the IREA’s findings from audits of the Strategy, CEMP and WEMPs.
- Section 4: Audit Conclusion – on the D&C Subcontractor’s conformance with the requirements of the Strategy, CEMP and WEMPs.
- Appendices
  - Appendix A – EPR Auditing Status
  - Appendix B – IREA Specialist Team
  - Appendix C – Limitations.

## 2 CONDUCT OF AUDITS

### 2.1 Audit Objectives

The objective of the audits summarised in this report is to assess conformance with the current Strategy, the CEMP, and the WEMPs based on the requirement of EPR EMP3. This includes conformance with the primary approvals (refer Section 1.2.2 above). The objective of these audits is to sample compliance with requirements over the period of September 2020 to February 2021 (inclusive).

### 2.2 IREA Auditing Process

Figure 3 below details the key steps of the IREA environmental auditing process.

During the COVID-19 pandemic state of emergency which started in March 2020, construction has continued and the IREA has completed all of the required environmental audits and continued surveillance following the IREA COVIDSafe work practices and protocols in line with prevailing Victorian Government health advice.

### 2.3 Audit Scope

The IREA determines the scope of these audits, which changes based on which Project issues, activities and environmental risks are considered to be significant at the time of audit. Considerations may include:

- Implementation of the CEMP and associated management system and tools.
- Analyses of environmental monitoring results, focusing on groundwater, noise, vibration, surface water, and air quality.
- Environmental risks relating to current construction activities.
- Concerns of the community.
- Compliance status of EPRs.

The IREA reviews a sample of environmental requirements (and evidence of compliance) over the auditing period. It is not feasible or necessary to fully audit all requirements in a six-month period (there are thousands of requirements e.g. legislation, EPRs, contract, CEMP, subplans). For example, the IREA excludes requirements, such as operational EPRs, which are not part of the current scope of work.

It should be noted that while all environmental requirements are not formally audited over a six-month period, the IREA is required to “check” compliance with environmental requirements through activities such as formal review of documentation and inspection of the construction site (refer Section 1.3). This means that a much larger set of requirements relevant to the Project period will be checked by the IREA for compliance during this period.

In this six-month reporting period, 45 of the 117 EPRs were audited by the IREA. A further 54 EPRs were audited during the previous reporting period (March 2020 – August 2020), bringing the total EPRs audited for this 12-month period to 99 (refer Appendix A). The remaining EPRs not audited include:

- Five operational EPRs that are not relevant to construction.
- Five EPRs that have been met and deemed closed.
- Four EPRs relating to blasting and ground-borne activities, which are currently outside of the Project’s scope.
- Four EPRs relating to complete design components, which are being monitored by the IREA through other established processes, rather than explicit auditing.

The environmental requirements audited and checked by the IREA during this 12-month period are summarised below and shown in Appendix A.

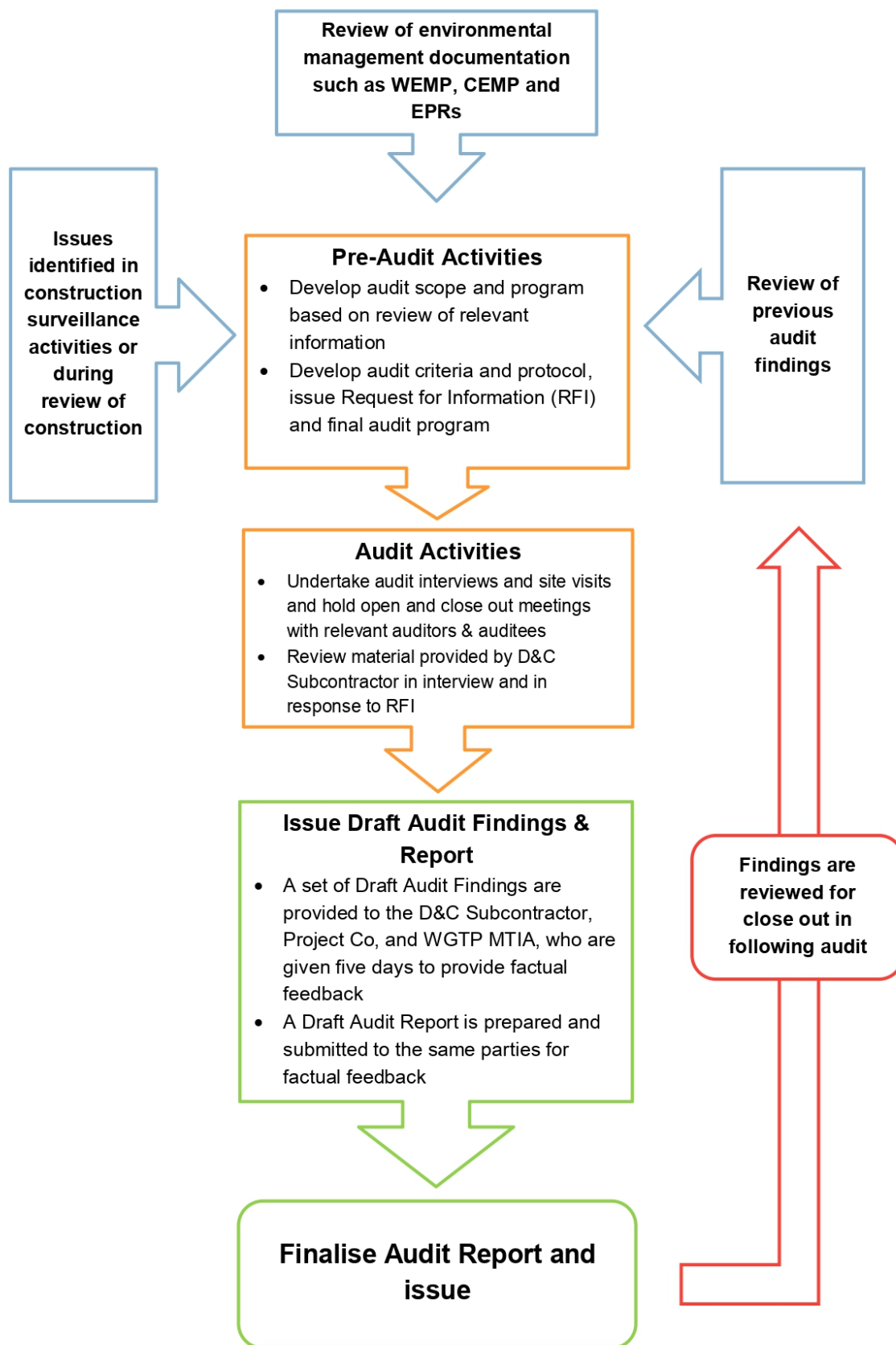


Figure 3 – Overview of environmental audit process

A summary of the scope of the audits conducted by the IREA is provided in Table 2 below.

Table 2 – Summary of Audits Conducted During Reporting Period – September 2020 to February 2021

Audit Type	Date	Scope
Strategy Audit	February 2021	<ul style="list-style-type: none"> <li>Strategy (revision 6) dated 31 January 2018 and the legislation, approvals, consents, guidelines and standards relevant to its implementation.</li> </ul>
CEMP Audit	November 2020 & February 2021	<ul style="list-style-type: none"> <li>Elements 1, 3, 8 and 12 of the CEMP. Revision 10 (dated 11 December 2019) of the CEMP was audited in the May 2020 and August 2020 audits.</li> <li>Relevant documentation including relevant D&amp;C Subcontractor management plans and subplans such as the Air Quality Management Plan, Business Involvement Plan, Construction Communications and Community Engagement Plan, Construction Noise and Vibration Management Plan, Flora and Fauna Management Plan, Groundwater Management Plan, Hazardous Substances Management Plan, Historic Places and Archaeological Management Plan and Water Management Plan were also audited. A full overview of CEMP documentation audited during this reporting period is provided in Section 3.3.</li> <li>A selection of EPRs relevant to the current stage of design and construction (as defined in Appendix A). Overview of EPR documentation audited during this reporting period is provided in Section 3.2.</li> </ul>
WEMP Audit	September 2020 Tunnels Zone	<ul style="list-style-type: none"> <li>Site audit at South Portal Outbound.</li> </ul>
	October 2020 East Zone Tunnels Zone West Zone	<ul style="list-style-type: none"> <li>Site audit at Wurundjeri Way (East Zone), South Portal Inbound (Tunnels Zone), and Millers Road and Inbound / Outbound carriageway (West Zone).</li> </ul>
	November 2020 West Zone	<ul style="list-style-type: none"> <li>Site audit at West Gate Freeway.</li> </ul>
	December 2020 Tunnels Zone	<ul style="list-style-type: none"> <li>Site audit at South Portal Inbound.</li> </ul>
	January 2021 East Zone	<ul style="list-style-type: none"> <li>Site audit at Maribyrnong River crossing and Mackenzie Road, and Footscray Road main viaduct.</li> </ul>
	February 2021 West Zone	<ul style="list-style-type: none"> <li>Site audit at M80 Interchange.</li> </ul>

The IREA's view on conformance was informed by interviews with staff from the D&C Subcontractor, and review of relevant systems, tools and documentation developed and implemented. The IREA has reported on findings raised between 1 September 2020 and 28 February 2021, and on findings closed between 1 October 2020 and 31 March 2021. Findings closed between 1 and 30 September 2020 have been included in the previous reporting period (March 2020 – August 2020).

### 2.3.1 Design and Construction Activities – September 2020 to February 2021

The current evaluation by the D&C Subcontractor<sup>2</sup> is that progress of physical construction is 31.9% and the overall design for the Permanent Works is 99% complete based on earned value.

Construction activities continue across the Project. Recent key activities include:

- West
  - The main focus for the West Zone has been planning and completing the works for the Summer Blitz Campaign. The Summer Blitz Campaign focused on M80 area and widening Grieves Parade bridge. Road widening and construction of ramps works are focused at M80 interchange and Westgate Freeway. There was a full freeway closure for six days over the summer holidays to demolish and remove the older section of the Grieves Parade bridge which is to be replaced by a new section of bridge. The centre median works in Stage 2 have continued with earthworks and pavement construction. In Hyde Street area, bridge substructure works have continued on Hyde Street exit bridge and Hyde Street entry bridge. In parallel with these works, the D&C Subcontractor has continued with bridge widenings and strengthening at Kororoit Creek bridge and Millers Road bridge, installation of noise walls, pavements and concrete works.
- Tunnels and Portals
  - Whilst the Tunnel Boring Machine (TBM) launch has remained delayed, maintenance and Back End Work preparations have continued. The North Portal Cut and Cover structure is currently 88% complete with balance of precast on hold subject to access constraints and completion of the slipforming campaign. Southern portal and west zone spoil stockpile haulage has progressed significantly since December 2020 with an estimated 125,000 m<sup>3</sup> been removed off site to free up various West Gate Freeway work fronts. As a result, bulk excavation and support at the Inbound South Portal has progressed to 35% complete and is approaching Groundwater Level. Temporary works are underway for TBM retrieval. Similarly, bulk excavation and support is 98% complete at the Outbound South Portal in the TBM reception and Melbourne Fire Brigade Ramp area in preparation for retrieval works and will be completed by early May 2021 – excavation is simultaneously progressing westwards to permit access for the CD-23 on-ramp civil works. The Outbound South Portal Cut and Cover structure is currently 70% complete, with walls, base slabs, smoke duct, vent and roof level precast and topping advancing. Precast manufacture, delivery and placement remain a major focus across the Tunnels and Portals Zone.
- East
  - Substructure works for the three bridges over the Maribyrnong River have continued to progress including crossheads on the eastern bank for the main bridge. The Mackenzie Road diversion has been opened to the public, enabling the commencement of pile driving for the bridge along Mackenzie Road. Construction of abutments for the bridge over Maribyrnong River south of the main bridge and the Footscray Road bridge are well-progressed. Multiple precast piers have been erected along Footscray Road bridge. Preparation works for the launching gantry have continued. Since late 2020, the Footscray Road and Citylink connection area teams have primarily been focused on installing the remaining piles and constructing pile caps. The truckie diner has been relocated to Footscray Road (near gate 1). Two precast crossheads have been installed to the bridge south of Footscray Road. The installation of steel props required for the CityLink widening works is well-advanced and fabrication of demolition platforms is well-progressed. The removal of redundant 66kV overhead cables has been complete and demolition of lattice towers is well-progressed. Displacement piles, bored piles, and pile caps have continued to be installed and constructed at various locations within Dynon Road and Wurundjeri Way area.

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<sup>2</sup> WGT-100-000-REP-CJH-100-000-0002 Report Date 1 March 2021





*Photo 1 – Launching gantry and precast column works along Footscray Road – East Zone (Source: WGTP MTIA, 18 February 2021)*

## 2.4 Audit Findings Classification

Audit findings are classified in each audit according to the following definitions which are aligned with classifications provided by AS/NZS ISO14001: 2015, the Joint Accreditation System of Australia and New Zealand (JAS-ANZ), and audit classifications utilised on previous high-profile Victorian infrastructure projects. The definitions of conformance, non-conformance, opportunity for improvement, observation, and not applicable are provided below.

### Conformance

There is suitable evidence to confirm that actions have been undertaken, prepared and/or implemented in full conformance with the requirements of the auditable element. Findings are reported by exception only, and as such conformances are not detailed within this report.

### Non-conformance

An instance, event or occurrence that has not fulfilled a requirement that has been specified in the Strategy, CEMP, WEMP, EPRs, legislation, and approval conditions. A situation, which would, on the basis of available objective evidence raise significant doubt as to the effectiveness of environmental management.

(Note: A non-conformance may be an individual non-conformance or a number of minor but related audit findings, which when considered in total are judged to constitute a non-conformance.)

## **Opportunity for Improvement**

A deficiency in the implementation of the Strategy, CEMP, WEMPs, or associated documentation judged to be a risk to the environment, or to environmental management, without constituting an overall failure in the area concerned.

(Note: The title of this category has been modified from the last report without any change to the definition. The previous title of this finding category was “Area for Improvement”.)

## **Observation**

An audit finding which may relate to an incidental or isolated system discrepancy, which does not compromise the effectiveness of environmental management, or constitute an actual or potential environmental risk. Observations are also made to note a positive improvement on the Project.

## **Not Applicable**

The auditable element falls outside the scope of the audit, e.g. work relevant to the element being audited has not yet commenced. Findings are reported by exception only, and as such ‘Not Applicable’ findings are not detailed within this report.

It should be noted that the audit only reports on non-conformances, areas for improvement and observations against the CEMP findings. All other areas within the scope of the audit should be assumed to be compliant. Where EPRs have been audited, compliance findings are also included.

The IREA does not require observations to be formally closed out after they have been issued and therefore will not report these in subsequent audit reports. It is the responsibility of the D&C Subcontractor and Project Co to address these findings.

## **Significance of Findings**

The nature of findings may vary. In reviewing the results of audit findings, it is necessary to understand the context in which they have been issued. For instance, some findings may be administrative in nature compared with those that pose an immediate and/or significant risk to the environment. An example of an administrative finding might include the requirement for the D&C Subcontractor to use a particular system to record incidents, where this is defined in the CEMP. However, if the D&C Subcontractor has upgraded this system and replaced it with an alternative, this means the CEMP is now out of date and does not reflect current practices. The D&C Subcontractor in this case may not be conforming with the original CEMP (which is captured as a non-conformance in an audit), but it does not necessarily mean that incidents are not being reported. This requirement is likely to be modified in the next version of the CEMP. Administrative findings therefore do not always pose a significant risk to the environment.

Alternatively, if the D&C Subcontractor was found to have caused an incident resulting in a discharge to the river, this would be viewed as an environmental non-conformance of greater significance.

Similarly, some findings are localised (rather than systemic) in nature. For example, a non-conformance raised against a WEMP may reflect an immediate issue at a particular worksite, which can be addressed and closed out by taking immediate on-site action.





*Photo 2 – Muir Street Pedestrian Bridge and West Gate Freeway centre median works – West Zone (Source: WGTP MTIA, 10 December 2020)*

### 3 SIX-MONTHLY AUDIT FINDINGS

The key findings arising from the IREA's most recent six months of auditing are included in the sub-sections below.

- Section 3.1 summarises audit findings of the Strategy.
- Section 3.2 outlines findings of formal auditing and checking of EPRs.
- Section 3.3 describes audit findings against the CEMP and subplans.
- Section 3.4 provides findings of the WEMP audits.

#### 3.1 Environmental Management Strategy

Audits of the Strategy are conducted six-monthly, with one conducted during this reporting period. Overall, Project Co was found to be meeting their obligations under the Strategy.

No adverse findings were raised against Project Co during the Strategy audit.

##### Previous reporting periods

No findings remain open from previous reporting periods.

#### 3.2 Environmental Performance Requirements

The majority of EPRs formally audited during this reporting period was considered compliant. No non-conformances were raised during the reporting period. A number of opportunities for improvement and observations were raised, noting that the following section focuses on the opportunities for improvement only.

Project Co / the D&C Subcontractor is responsible for delivering the majority of EPRs listed below unless otherwise specified as being delivered by the State.

##### 3.2.1 Environmental Management

One environmental management EPR was audited during this reporting period, namely EMP3. It was deemed compliant.

##### Previous reporting periods

One opportunity for improvement raised against EMP2 was closed during this reporting period.

Two opportunities for improvement against EMP4 remain open from previous auditing periods.

Refer also to related CEMP findings in Section 3.3.

##### 3.2.2 Air Quality

No air quality EPRs were audited during this reporting period.

##### Previous reporting periods

The non-conformance raised against AQP6 was closed during this reporting period.

No findings remain open from previous reporting periods.

Refer also to related Air Quality Management Plan findings in Section 3.3.1.

### **3.2.3 Business**

Seven business EPRs were audited during this reporting period, namely BP1, BP2, BP3, BP4, BP7, BP8 and BP9.

One opportunity for improvement was raised against BP3 as the D&C Subcontractor did not provide evidence of consultation with the Hobsons Bay City Council relating to the absence of visual screening on the north side of the Westgate Freeway between the Project works and the West Gate Golf Course

One observation was raised against BP2 as noise mitigation measures were not included in the notification for a business facility during the Millers Road Spring Road works.

BP1, BP4, BP7, BP8 and BP9 were deemed compliant.

#### **Previous reporting periods**

One opportunity for improvement raised against BP3 was closed during this reporting period.

Two opportunities for improvement remain open against BP5 from previous reporting periods.

Refer also to related Business Involvement Plan findings in Section 3.3.14.

### **3.2.4 Cultural Heritage**

Five cultural heritage EPRs were audited during this reporting period, namely CHP4, CHP5, CHP6, CHP10 and CHP12. All were deemed compliant.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

Refer also to related Heritage Management Plan findings in Section 3.3.8.

### **3.2.5 Contaminated Soil and Spoil Management**

Four contaminated soil and spoil management EPRs were audited during this reporting period, namely CSP1, CSP2, CSP3 and CSP4.

One opportunity for improvement was raised against CSP2 as the Soil and Spoil Management Plan is in the process of being updated following EPA comments on Revision 12. As per EPR CSP2 this subplan needs to be to the satisfaction of EPA.

CSPS1, CSP3 and CSP4 were deemed compliant.

#### **Previous reporting periods**

One opportunity for improvement raised against CSP2 was closed during this reporting period.

No findings remain open from previous reporting periods.

Refer also to related Soil and Spoil Management Plan findings in Section 3.3.10.



Photo 3 – South Portal Outbound - Tunnels Zone (Source: WGTP MTIA, 18 November 2020)

### 3.2.6 Ecology

Two ecology EPRs were audited during this reporting period, namely EP3 and EP6. Both were deemed compliant.

#### Previous reporting periods

No findings remain open from previous reporting periods.

Refer also to related Flora and Fauna Management Plan findings in Section 3.3.4.

### 3.2.7 Greenhouse Gas Emissions

One greenhouse gas emissions EPR was audited during this reporting period, namely GGP2. One observation was raised relating to the development and implementation of process to track material usage during construction phase.

#### Previous reporting periods

No findings remain open from previous reporting periods.

Refer also to related Energy Management Plan findings in Section 3.3.3.

### 3.2.8 Ground Movement

Six ground movement EPRs were audited during this reporting period, namely GMP1, GMP2, GMP3, GMP4, GMP5 and GMP6. All were deemed compliant.



### **Previous reporting periods**

No findings remain open from previous reporting periods.

Refer also to related Ground Movement Management Plan findings in Section 3.3.5.

## **3.2.9 Groundwater**

Two groundwater EPRs were audited during this reporting period, namely GWP3 and GWP7.

One opportunity for improvement was raised against GWP3 as the D&C Subcontractor was not able to confirm whether groundwater baseline data relevant to Stony Creek area was being collected and where responsibility for the collection of such data sat.

GWP7 was deemed compliant.

### **Previous reporting periods**

One opportunity for improvement remains open against GWP1 from previous reporting period.

Refer also to related Groundwater Management Plan findings in Section 3.3.6.

## **3.2.10 Land Use**

Two land use EPRs were audited during this period, namely LPP2 and LPP5. All were deemed compliant.

### **Previous reporting periods**

No findings remain open from previous reporting periods.

Refer also to related Landscape Management Plan findings in Section 3.3.13.

## **3.2.11 Landscape and Visual**

Four landscape and visual EPRs were audited during this reporting period, namely LVP2, LVP3, LVP4 and LVP5. All were deemed compliant.

### **Previous reporting periods**

One non-conformance raised against LVP1 was closed during this reporting period.

Refer also to related Landscape Management Plan findings in Section 3.3.13.

## **3.2.12 Noise and Vibration**

Two noise and vibration EPRs were audited during this reporting period, namely NVP11 and NVP13. Both were deemed compliant.

The IREA also notes that a number of NVP EPRs were not audited in the audit period as they relate to blasting, tunnelling and/or operational phase, which does not currently relate to the scope of the Project. These inactive EPRs are NVP3, NVP6, NVP9, NVP12, NVP15, NVP16 and NVP17.

### **Previous reporting periods**

Three opportunities for improvement remain open against NVP8 (two findings) and NVP18 from previous reporting periods.

Refer also to Construction Noise and Vibration Management Plan findings in Section 3.3.2.



*Photo 4 – Permanent noise walls on West Gate Freeway – West Zone (Source: WGTP MTIA, 10 December 2020)*

### **3.2.13 Social**

Three social EPRs were audited during this reporting period, namely SP3, SP4 and SP5.

One observation was raised against SP3 as the State noted that reporting and monitoring of community feedback and issues could be further discussed in the Community Liaison Group meetings.

SP4 and SP5 were deemed compliant.

#### **Previous reporting periods**

Two opportunities for improvement remain open against SP2 from previous reporting periods.

### **3.2.14 Surface Water**

One surface water EPR was audited during this reporting period, namely SWP8. It was deemed compliant.

#### **Previous reporting period**

The opportunity for improvement raised against SWP6 was closed during this reporting period.

Two opportunities for improvement remain open against SWP7 and SWP 9 from previous reporting periods.

Refer also to Water Management Plan findings in Section 3.3.12.

### 3.2.15 Transport

Four transport EPRs were audited this reporting period, namely TP1, TP4, TP5 and TP8.

One observation was raised against TP1 as the relevant design package does not identify the EPR as being of relevance to the package and, therefore, does not directly address this EPR.

TP4, TP5 and TP8 were deemed compliant.

#### Previous reporting periods

The opportunity for improvement remains open against TP1 from previous reporting periods.

### 3.2.16 Waste Management

WMP1 was audited during this reporting period and it was deemed compliant.

#### Previous reporting periods

No findings remain open from previous reporting periods.

Refer also to Waste Management Plan findings in Section 3.3.11.

## 3.3 Construction Environmental Management Plan

### Overview

CEMP audits are conducted on a quarterly basis, with two CEMP audits conducted during the reporting period.

During the November 2020 audit the following management plans and sections were audited:

- CEMP (Element 2 Planning, Element 7 Training and Competency, and Element 11 Document and Record Management).
- Ground Movement Management Plan (Section 5 Monitoring).
- Landscape Management Plan (Section 3 Implementation).
- Lighting Management Plan (Section 4 Management, and Section 5 Monitoring).
- Soil and Spoil Management Plan (Section 4 Management, Section 5 Monitoring and Inspections, and Section 8 Training and Awareness).

During the February 2021 audit the following management plans and sections were audited:

- CEMP (Element 4 Risk and Opportunity Management, Element 5 Change Management, Element 6 Communication and Consultation, Element 9 Incident Management, and Element 10 Emergency Response).
- Ground Movement Management Plan (Section 4 Monitoring).
- Heritage Management Plan (Section 9 Training).
- Waste Management Plan (Section 4 Management Measures).

### Current Reporting Period

Two opportunities for improvement and six observations were raised against the following CEMP Elements:

- One opportunity for improvement against Element 9.6 as the D&C Subcontractor did not provide evidence of erosion and sediment controls for works within the Kororoit Creek area had been communicated to relevant site personnel.
- One opportunity for improvement against Element 10.4 as no environmental emergency response drills were conducted in 2020.

- One observation against Element 2.1 as there were a number of environmental roles on the Project that remained vacant throughout 2020 due to recruitment freeze in response to COVID-19 restrictions. The D&C Subcontractor had a plan in place to restore their personnel following easing of restrictions.
- One observation against Element 2.2 relating to an outdated document referenced in the CEMP.
- One observation against Element 2.3 as the Water Management Plan, Groundwater Management Plan and Construction Noise and Vibration Management Plan had not been formally reviewed within the six-month update or revision interval requirement of the Project. The D&C Subcontractor had a plan in place to review and update these subplans.
- One observation against Element 4.7 relating to an incorrect review date noted in the change log of the CEMP Risk Register.
- One observation against Element 9.1 as the action plan relevant to a Severity 3 environmental incident was not recorded in Synergy as required.
- One observation against Element 10.2 as the Revision 5 of the Emergency Risk Management Plan reviewed by the D&C Subcontractor in June 2019 was provided as the current version of the plan, whilst in the previous audit the D&C Subcontractor stated that the plan had been updated in February 2020.

### **Previous Reporting Periods**

One non-conformance and four opportunities for improvement raised against the CEMP were closed during this reporting period.

One non-conformance and three opportunities for improvement remain open against the CEMP from previous reporting periods.

## **3.3.1 Air Quality Management Plan**

The Air Quality Management Plan (AQMP) was not specifically audited during this reporting period.

### **Previous reporting periods**

No findings remain open from previous reporting periods.

Refer to Section 3.2.2 for findings relating to air quality EPRs.

## **3.3.2 Construction Noise and Vibration Management Plan**

The Construction Noise and Vibration Management Plan (CNVMP) was not specifically audited during this reporting period.

### **Previous reporting periods**

Two opportunities for improvement remain open from previous reporting periods.

Refer to Section 3.2.12 for findings relating to noise and vibration EPRs.

## **3.3.3 Energy Management Plan**

The Energy Management Plan (EMP) was not specifically audited during this reporting period.

### **Previous reporting periods**

No findings remain open from previous reporting periods.

Refer to Section 3.2.7 for findings relating to greenhouse gas emissions EPRs.

## **3.3.4 Flora and Fauna Management Plan**

The Flora and Fauna Management Plan (FFMP) was not specifically audited during this reporting period.



#### **Previous reporting periods**

No findings remain open from previous reporting periods.  
Refer to Section 3.2.6 for findings relating to ecology EPRs.

### **3.3.5 Ground Movement Management Plan**

No adverse findings were raised against the Ground Movement Management Plan (GMMP) during this reporting period.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.  
Refer to Section 3.2.8 for findings relating to ground movement EPRs.

### **3.3.6 Groundwater Management Plan**

The Groundwater Management Plan (GWMP) was not specifically audited during this reporting period.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.  
Refer to Section 3.2.9 for findings relating to groundwater EPRs.

### **3.3.7 Hazardous Substances Management Plan**

The Hazardous Substances Management Plan (HSMP) was not specifically audited during this reporting period.

#### **Previous reporting periods**

One opportunity for improvement was closed during this reporting period.  
No findings remain open from previous reporting periods.  
Refer to Section 3.2.14 for findings relating to hazardous substances EPRs.

### **3.3.8 Heritage Management Plan**

No adverse findings were raised against the Heritage Management Plan (HMP) during this reporting period.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.  
Refer to Section 3.2.4 for findings relating to cultural heritage EPRs.

### **3.3.9 Lighting Management Plan**

Two opportunities for improvement were raised against the Lighting Management Plan (LMP) during this reporting period. The opportunities for improvement were raised as the D&C Subcontractor did not provide evidence of (1) complete Permit to Notify and Work Out of Hours, including lighting management controls and signed off by relevant personnel for night works associated with the pedestrian bridges at Rosala Avenue and Muir Street, and (2) effectiveness of artificial lighting management controls being checked by the D&C Subcontractor during these night works.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

### 3.3.10 Soil and Spoil Management Plan

Two opportunities for improvement were raised against the Soil and Spoil Management Plan (SSMP) during this reporting period. One opportunity for improvement related to the newly introduced Project-wide spoil truck booking system not yet being included within the SSMP. The other opportunity for improvement was raised as the D&C Subcontractor did not provide evidence of pre-start meetings for the Westgate Freeway Centre Median works.

#### Previous reporting periods

One opportunity for improvement raised against the SSMP was closed during this reporting period.

No findings remain open from previous reporting periods.

Refer also to Section 3.2.5 for findings relating to soil and spoil EPRs.



Photo 5 – Excavation at Altona Memorial Park – M80 – West Zone (Source: WGTP MTIA, 10 December 2020)

### 3.3.11 Waste Management Plan

An observation was raised against the Waste Management Plan (WstMP) during this reporting period. This was raised as, during the site inspection, a small pile of general waste was observed on the ground, and mixed rubbish was observed in a recycling bin.

#### Previous reporting periods

No findings remain open from previous reporting periods.

Refer also to Section 3.2.16 for findings relating to waste EPR.

### 3.3.12 Water Management Plan

The Water Management Plan (WMP) was not specifically audited during this reporting period.

#### Previous reporting periods

One opportunity for improvement was closed during the reporting period.

One opportunity for improvement remains open from previous reporting periods.

Refer to Section 3.2.14 for findings relating to surface water EPRs.

### 3.3.13 Landscape Management Plan

Three observations were raised against the Landscape Management Plan (LdMP) during this reporting period:

- One observation as the draft revision to the LdMP (revision 8) did not include an update to the organisation chart.
- One observation as the Project-wide Offset Tree Planting design package did not consider landscape management documentation from Maribyrnong City Council and the City of Melbourne Council and did not provide justification for said consideration.
- One observation as the tree register sighted did not include a cross-reference to the arboricultural impact assessments for the trees included in the register.

The LdMP is not a subplan to the CEMP. The CEMP refers to a suite of other management plans, including the LdMP, which are required to demonstrate how these and other EPRs will be complied with.

#### Previous reporting periods

No findings remain open from previous reporting periods.

### 3.3.14 Business Involvement Plan

The Business Involvement Plan (BIP) was not specifically audited during this reporting period.

The BIP is not a subplan to the CEMP. The CEMP refers to a suite of other management plans, including the BIP, which are required to demonstrate how these and other EPRs will be complied with.

#### Previous reporting periods

One opportunity for improvement raised against the BIP remains open from previous reporting periods.

Refer to Section 3.2.3 for findings relating to business EPRs.

### 3.3.15 Construction Communications and Community Engagement Plan

The Construction Communications and Community Engagement Plan (CCCEP) was not specifically audited during this reporting period.

The CCCEP is not a subplan to the CEMP. The CEMP refers to a suite of other management plans, including the CCCEP, which are required to demonstrate how these and other EPRs will be complied with.

#### Previous reporting periods

No findings remain open from previous reporting periods.

### 3.4 Worksite Environmental Management Plan

WEMP audits are conducted on a monthly basis, with six WEMP audits conducted during this reporting period. A total of 34 findings were raised in this reporting period compared to 59 in the previous reporting period. Findings raised during this reporting period comprised:

- Two non-conformances.
- 18 opportunities for improvement.
- 14 observations.

The two non-conformances identified during this reporting period related to:

- Permit to Notify and Work Out of Hours was not issued for works occurring out of hours in the Tunnels Zone.
- Management of contaminated soil stockpiles in the West Zone.

Of all WEMP findings:

- 23% related to environmental management and were administrative in nature.
- 23% related to soil and spoil management.
- 21% related to noise and vibration management.
- 18% related to air quality.
- 6% related to water management.
- 6% related to tree management.
- 3% related to groundwater management.

These figures are reflective of the types of works happening across the Project, including soil and spoil management, and the targeted WEMP audit conducted during this reporting period. The IREA focused the October 2020 WEMP audit on the D&C Subcontractor activities relating to management of noise during out of hours works.

The D&C Subcontractor has increased efforts to close out WEMP audit findings in this reporting period, noting that a large number of WEMP findings still remain open. Of the 20 non-conformances and opportunities for improvement raised in this reporting period eight have been closed.

Eight opportunities for improvement remain open from previous reporting periods. All non-conformances from previous reporting periods have been closed.

The reporting period saw a decrease in the number of findings open compared to the previous reporting period. This decrease is also reflected in the total of WEMP audit findings remaining open. In total there are 20 outstanding findings, comprising two non-conformances and 18 opportunities for improvement.

#### 3.4.1 West Zone

Refer to Section 2.3.1 for an update on construction activities in the West Zone.

13 findings were raised during WEMP audits of the West Zone in this reporting period.

One non-conformance was raised related to management of contaminated soil stockpiles at the Ramp 10 area.

Six opportunities for improvement were raised:

- Two relating to contaminated soil and spoil management.
- Two relating to noise management for out of hours works.
- One relating to tree management.
- One relating to administrative environmental management issue.

Six observations were also raised.

Of the 13 findings raised during this period, one non-conformance and six opportunities for improvement raised during the reporting period remain open.

### **Previous reporting periods**

One non-conformance and seven opportunities for improvement raised against West Zone WEMPs from previous reporting periods were closed during this reporting period.

Six opportunities for improvement remain open from previous reporting periods.

## **3.4.2 Tunnel Zone**

Refer to Section 2.3.1 for an update on construction activities in the Tunnel Zone.

Fourteen findings were raised during WEMP audits of the Tunnel Zone in this reporting period.

One non-conformance was raised as a Permit to Notify and Work Out of Hours was not issued for the delivery of materials at night time to Inbound South Portal.

Eight opportunities for improvement were raised:

- Two relating to spoil stockpile management.
- One relating to noise management during out of hours works.
- One relating to vibration monitoring reporting.
- One relating to air quality monitoring.
- One relating to dust control.
- One relating to waste management.
- One relating to groundwater disposal and monitoring.

Five observations were raised.

Of the fourteen findings raised during this period, one non-conformance and one opportunity for improvement remain open.

### **Previous reporting periods**

Two opportunities for improvement raised against Tunnel Zone WEMPs from the previous reporting periods were closed.

No WEMP audit findings remain open from previous reporting periods.

## **3.4.3 East Zone**

Refer to Section 2.3.1 for an update on construction activities in the East Zone.

Seven findings were raised during WEMP audits of the East Zone in this reporting period.

Four opportunities for improvement were raised:

- Two against noise management and monitoring. One of these findings was closed following set up of low battery voltage alerts on Sixsense for continuous environmental monitors.
- One against contaminated soil and spoil management.
- One against air quality management. This finding was closed following provision of relevant evidence.

Three observations were raised.

Of the seven findings raised during this period, two opportunities for improvement remain open.



### Previous reporting periods

One non-conformance and five opportunities for improvement raised against East Zone WEMPs from previous reporting periods were closed during this reporting period.

Six opportunities for improvement remain open from previous reporting periods.



*Photo 6 – Dahlenburg Street diversion works – East Zone (Source: WGTP MTIA, 18 November 2020)*

## 4 AUDIT CONCLUSIONS

### Environmental Management Strategy

Project Co is generally meeting their obligations under the Strategy. No adverse findings were raised during this reporting period.

No findings remain open from previous reporting periods.

### Environmental Performance Requirements

During the last six-month reporting period the IREA formally audited 45 EPRs. The majority of EPRs audited during the reporting period were deemed compliant. The findings raised consisted of:

- No non-conformances.
- Three opportunities for improvement. These related to business, contaminated soil and spoil, and groundwater management.
- Four observations.

Two non-conformances and five opportunities for improvement from previous reporting periods were closed. In total there are 16 findings remaining open at the end of this reporting period, comprising no non-conformances and 16 opportunities for improvement.

Also refer to Appendix A for a summary of EPR compliance status and the upcoming EPR auditing schedule.

### Construction Environmental Management Plan

The last six-month reporting period focused on auditing a range of CEMP elements and subplans.

The CEMP audit findings for the November 2020 quarterly audit are summarised below:

- No non-conformances were raised during this audit.
- Four opportunities for improvement were raised during this audit. This included two against the Lighting Management Plan and two against the Soil and Spoil Management Plan. These generally related to documented evidence not provided.
- Six observations were also raised.

The CEMP audit findings for the February 2021 quarterly audit are summarised below:

- No non-conformances were raised during this audit.
- Two opportunities for improvement were raised against the CEMP relating to environmental emergency response drills and documented evidence not provided.
- Four observations were also raised.

One non-conformance and four opportunities for improvement from previous reporting periods were closed. In total there are eight findings remaining open at the end of this reporting period, comprising one non-conformance and seven opportunities for improvement. The IREA will continue to work with Project Co / D&C Subcontractor to close out any outstanding findings.

### Worksite Environment Management Plans

During the reporting period six WEMP audits were conducted. A total of 34 findings were raised in this reporting period. These consisted of:

- Two non-conformances
- 18 opportunities for improvement
- 14 observations.

The D&C Subcontractor has improved their system of reporting, communicating and closing out WEMP audit findings to the IREA across all zones and has improved their closure of WEMP findings. Two non-

conformances and 22 opportunities for improvement were closed during this reporting period. In total there are 20 WEMP audit findings remaining open, comprising two non-conformances and 18 opportunities for improvement. All findings raised between March 2018 and October 2019 were closed.

## **Conclusions**

The findings arising from this reporting period by the IREA have not identified any immediate significant or material risks to the environment.

Implementation of the EPRs was found to be generally compliant, with no non-conformances and three opportunities for improvement during the reporting period.

Audit findings during the period relate to a range of matters, mostly specific to on-site matters, including:

- Reapproval of the Soil and Spoil Management Plan following comments by the EPA.
- Assessment of environmental aspects such as noise and dust generation.
- Development and implementation of management actions.

There has been improvement in closing out audit findings. It is noted that a number of the audit findings from previous reporting periods remain open.



*Photo 7 – Maribyrnong River works – East Zone (Source: WGTP MTIA, 18 February 2021)*



**APPENDIX A- EPR AUDITING STATUS**

**Phase:** D = Design; PC = Pre-construction; C = Construction; PC = Pre-operation; O = Operation

**Type of review and surveillance:** MP = Management Plan; DP = Design Package; CR = Construction Documentation Review; CS = Construction Surveillance

ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO FEBRUARY 2021)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
ENVIRONMENTAL MANAGEMENT											
EMP1 Environmental Management Strategy	X								All	The IREA audited this EPR in August 2018 and it was deemed compliant. The IREA do not intend to audit this EPR again unless the EMS is updated	Project Co (WGTP MTIA will publish the Strategy)
EMP2 Environmental Management Plans	X		X	X	X				All	An opportunity for improvement was raised in May 2019 (May-19_EPR_01). This was closed in October 2020. The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C / OpCo
EMP3 Environmental Compliance								X	PC, C, O	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C / OpCo (WGTP MTIA will forward audit reports to Minister for Planning and will publish audit reports only)
EMP4 Complaints Management System	X				X				PC, C	An opportunity for improvement was raised in August 2018 (Aug-18_EPR_04) and another in May 2019 (May-19_EPR_02). Both findings remain open. The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
AIR QUALITY											
AQP1 Tunnel Ventilation System Design		X			X				D, C	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
AQP2 Zero Portal Emissions		X		X	X				D, O	The IREA audited this EPR in May 2020 and it was deemed compliant. As the design component is complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C / OpCo
AQP3 In Tunnel Air Quality		X		X	X				D, O	The IREA audited this EPR in May 2020, and it was deemed compliant. As the design component is complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C / OpCo
AQP4 Ambient Air Quality Monitoring	X			X	X				C, O	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C / OpCo
AQP5 In Tunnel Air Quality and Ventilation Structure Emissions Compliance									O	N/A - operational EPR.	OpCo
AQP6 Air Quality During Construction	X		X	X	X				C	A non-conformance was raised in May 2020 (May-20_EPR_07). This was closed in November 2020.	D&C
AQP7 Roadside Air Quality Mitigation Strategy									O	N/A - operational EPR.	WGTP MTIA (OpCo)
BUSINESS											
BP1 Damage or Impacts on Third Party Property and Infrastructure	X	X	X	X			X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
BP2 Access and Amenity for Business and Commercial Facilities		X	X	X			X		D, C	An opportunity for improvement was raised in November 2019 (Nov-19_EPR_02). This was closed in August 2020 audit. A new observation was raised in November 2020 (Nov-20_EPR_02). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
BP3 Screening		X	X	X			X		C	An opportunity for improvement was raised in February 2020 (Feb-20_EPR_09). This was closed in February 2021. A new opportunity for improvement was raised in November 2020 (Nov-20_EPR_03) and remains open.	D&C
BP4 Impacts on Operation of Community, Private Recreation and Council Facilities and Services		X	X	X			X		All	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C / OpCo
BP5 Business Involvement Plan	X		X	X		X			PC, C	An opportunity for improvement was raised in August 2018 (Aug-18_EPR_07) and another in August 2019 (Aug-19_EPR_26). Both findings remain open. The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
BP6 Utility Assets		X	X	X		X			D, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
BP7 Gas Utilities		X	X	X			X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C

ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO FEBRUARY 2021)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
BP8 Business Disruption		X	X	X				X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
BP9 Business Acquisition Process		X	X	X			X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	WGTP MTIA
CULTURAL HERITAGE											
CHP1 Cultural Heritage Management Plan	X	X	X	X	X				D, C	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
CHP2 Design and Construction to Minimise Impacts on Heritage		X	X	X		X			D, PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
CHP3 Archaeological Management Plan	X		X	X		X			PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
CHP4 Monitoring of Heritage Sites and Places		X	X	X				X	C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
CHP5 Archival Photographic Records		X						X	PC	The IREA audited this EPR in February 2021 and it was deemed complaint.	D&C
CHP6 Port Phillip Monument		X						X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
CHP7 Heritage Interpretation Strategy	X	X				X			PC, C	An observation was raised in August 2020 (Aug-20_EPR_05). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
CHP8 Shipwrecks	X	X	X	X		X			PC, C	The IREA audited this EPR in August 2020 and it was deemed complaint.	D&C
CHP9 Maribyrnong River Front (Footscray)		X	X	X		X			D	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
CHP10 Bluestone Bridge		X					X		C	The IREA audited this EPR in November 2020 and it was deemed complaint.	D&C
CHP11 Rail Turntables		X	X	X					D	The IREA audited this EPR in November 2019 and it was deemed complaint. As the design component is complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing.	D&C
CHP12 Flinders Street								X	C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
CONTAMINATED SOIL AND SPOIL MANAGEMENT											
CSP1 Contaminated Soil Requirements	X	X	X	X			X		C	An opportunity for improvement was raised in May 2019 (May-19_EPR_10). This was closed in May 2020. The IREA audited this EPR in November 2020. No finding was raised, a related finding was instead raised against EPR CSP2 (refer Nov-20_EPR_09).	D&C
CSP2 Contaminated Soil and Spoil Management	X	X	X	X			X		PC, C	An opportunity for improvement was raised in August 2018 (Aug-18_EPR_09). This was closed in October 2020. A new opportunity for improvement and an observation were raised in May 2019 (May-19_EPR_10, May-19_EPR_11). As agreed on 1 February 2019 observations are to be closed once reported on initially. The opportunity for improvement (May-19_EPR_10) was closed in May 2020. A new opportunity for improvement was raised in November 2020 (Nov-20_EPR_09) and remains open.	D&C
CSP3 Acid Sulphate Soil	X		X	X			X		PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
CSP4 Odour Management	X		X	X			X		C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
ECOLOGY											
EP1 Minimise Vegetation Removal and Disturbance		X	X	X		X			D, PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
EP2 Vegetation Protection Measures	X	X	X	X		X			PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
EP3 Reinstatement		X	X	X				X	C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
EP4 Fauna Management Measures	X	X	X	X		X			PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C

ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO FEBRUARY 2021)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
EP5 Works on Waterways		X	X	X	X				D, C	An opportunity for improvement and an observation were raised in May 2020 (May-20_EPR_09, May-20_EPR_10). As agreed on 1 February 2019 observations are to be closed once reported on initially. The opportunity for improvement (May-20_EPR_09) was closed in September 2020.	D&C
EP6 Landscaping Plan		X					X		D, PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
EP7 Vegetation Offsets	X		X	X		X			C	The IREA audited this EPR in August 2020 and it was deemed compliant.	WGTP MTIA
GREENHOUSE GAS EMISSIONS											
GGP1 Greenhouse Gas Emissions		X	X	X	X				D	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
GGP2 Emissions Reduction		X	X	X			X		D, C	An opportunity for improvement was raised in August 2018 (Aug-18_EPR_12). This was closed in August 2020. A new observation was raised in November 2020 (Nov-20_EPR_13). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
GROUND MOVEMENT											
GMP1 Geotechnical Model and Assessment		X	X	X			X		PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
GMP2 Tunnel and Portal Drainage		X	X	X				X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
GMP3 Condition Surveys and Determination of Settlement Criteria for Property and Infrastructure		X	X	X				X	PC, C, O	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C / OpCo
GMP4 Settlement Criteria for Utilities		X	X	X				X	PC	The IREA audited this EPR in February 2021 and it was deemed complaint.	D&C
GMP5 Ground Movement Monitoring	X	X	X	X			X		PC, C, O	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C / OpCo
GMP6 Mitigation of Ground Movement Impact	X	X	X	X				X	C, O	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C / OpCo
GROUNDWATER											
GWP1 Groundwater Management Measures	X	X	X	X		X			PC, C, O	An opportunity for improvement was raised in August 2020 (Aug-20_EPR_13) and remains open.	D&C / OpCo
GWP2 Protection of Groundwater Quality	X		X	X		X			C	An opportunity for improvement was raised in November 2018 (Nov-18_EPR_22). This was closed in June 2020. The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
GWP3 Tunnel Drainage Design and Construction Methods		X	X	X				X	D, PC, C	An opportunity for improvement was raised in February 2021(Feb-21_EPR_12) and remains open.	D&C
GWP4 Predictive Groundwater Model		X	X	X		X			PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
GWP5 Groundwater Monitoring			X	X		X			PC, C, O	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C / OpCo
GWP6 Interception of Groundwater	X	X	X	X		X			C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
GWP7 Impacts on Groundwater Users		X	X	X				X	PC, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
LAND USE											
LPP1 Minimise Design Footprint		X			X				D	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
LPP2 Recreation Facilities		X	X	X				X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
LPP3 Future Development Opportunities		X			X				D	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
LPP4 Pedestrian and Bicycle Connections		X			X				D	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
LPP5 Public Land		X	X	X				X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
LANDSCAPE AND VISUAL											

ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO FEBRUARY 2021)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
LVP1 Urban Design Approach		X	X	X		X			D, C	A non-conformance was raised in February 2020 and (Feb-20_EPR_15). This was closed in February 2021. The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
LVP2 Reinstatement Following Temporary Works		X						X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
LVP3 Light Spillage	X	X	X	X			X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
LVP4 Vegetation Screening		X					X		C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
LVP5 Design Review							X		D	The IREA audited this EPR in November 2020 and it was deemed compliant.	WGTP MTIA (on receipt of relevant design documentation in accordance with the design review process)
NOISE AND VIBRATION											
NVP1 Traffic Noise Limits		X	X	X		X			D, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
NVP2 Traffic Noise Reduction of Open Space		X	X	X	X				D, C	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
NVP3 Maintenance of Noise Mitigation Measures									O	N/A - operational EPR.	OpCo (for the maintenance of noise mitigation measures in accordance with sections 18.4 and 18.5 of Part B, otherwise WGTP MTIA)
NVP4 Traffic Noise Reduction of Millers Road North of West Gate Freeway					X				PO	The IREA audited this EPR in May 2020 and it was deemed compliant.	State
NVP5 Construction of Noise Barriers		X	X	X	X				C	An observation was raised in May 2020 (May-20_EPR_17). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
NVP6 Traffic Noise Monitoring		X							PO, O	N/A - based on Project status this EPR is currently not relevant.	OpCo (for the O&M phase in accordance with sections 18.4 and 18.5 of Part B, otherwise WGTP MTIA)
NVP7 Construction Noise, Vibration Management, and Monitoring	X		X	X		X			PC, C	An observation was raised in August 2020 (Aug-20_EPR_20). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
NVP8 Construction Noise Targets			X	X		X			C	Two opportunities for improvement were raised as separate findings in May 2019 (May-19_EPR_24, May-19_EPR_25). May-19_EPR_25 was closed in May 2020 audit, and May-19_EPR_24 remains open. A new opportunity for improvement and an observation were raised in August 2020 (Aug-20_EPR_21 and Aug-20_EPR_22). As agreed on 1 February 2019 observations are to be closed once reported on initially. The opportunity for improvement (Aug-20_EPR_21) remains open.	D&C
NVP9 Blasting Trials and Assessment									C	The IREA audited this EPR in February 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 audit period as it is not relevant to the current scope.	D&C
NVP10 Construction Vibration Targets (Amenity)			X	X		X			C	A non-conformance was raised in February 2019 (Feb-19_EPR_22) and an opportunity for improvement was raised in August 2019 (Aug-19_EPR_13). Both findings were closed in June 2020. An observation was raised in August 2020 (Aug-20_EPR_23). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
NVP11 Construction Vibration Targets (Structures)			X	X			X		C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
NVP12 Ground-borne (Internal) Noise Targets									C	The IREA audited this EPR in February 2019 and it was deemed compliant. It was not audited in the subsequent audit period as it was not relevant to the current scope.	D&C
NVP13 Utility Asset Protection		X	X	X			X		PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C



ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO FEBRUARY 2021)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
NVP14 Tunnel Ventilation System Noise Design				X	X				D, O	The IREA audited this EPR in May 2020 and it was deemed compliant. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C / OpCo
NVP15 Tunnel Ventilation System Noise Monitoring									O	N/A - operational EPR.	OpCo
NVP16 Amenity Blast Vibration									C	The IREA audited this EPR in February 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 audit period as it is not relevant the current scope.	D&C
NVP17 Amenity Blast Overpressure Implement									C	The IREA audited this EPR in February 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 audit period as it is not relevant to the current scope.	D&C
NVP18 Construction Noise Management	X		X	X		X			C	An opportunity for improvement was raised in August 2020 (Aug-20_EPR_24) and remains open.	D&C
NVP19 Traffic Noise of Hyde Street, South of Francis Street									C	The IREA audited this EPR in February 2020 and it was deemed compliant. It will not be audited in the 2020 – 2021 period as it is considered closed.	WGTP MTIA
SOCIAL											
SP1 Urban Design Principles and Vision		X				X			D	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
SP2 Communications and Community Engagement Plan (CCEP)	X		X	X	X				PC, C, O	Two opportunities for improvement were raised in May 2019 (May-19_EPR_26, May-19_EPR_27) and remain open. The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C / OpCo
SP3 Community Liaison Group Participation							X		C	An observation was raised in November 2020 (Nov-20_EPR_21). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C / WGTP MTIA
SP4 Social and Local Procurement	X							X	PC, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
SP5 Community Involvement and Participation Plan (CIPP)	X						X		PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	WGTP MTIA
SURFACE WATER											
SWP1 Design of Discharges and Runoff		X			X				D	An observation was raised in May 2020 (May-20_EPR_20). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
SWP2 Water Sensitive Road Design		X							D	The IREA audited this EPR in November 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 period as it is considered closed.	D&C
SWP3 Tunnel Waste Water		X	X	X					PC	The IREA audited this EPR in February 2020 and it was deemed compliant. This EPR relates to operations-phase waste water. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C
SWP4 Water Quality Monitoring	X		X	X					PC	The IREA audited this EPR in August 2018 and it was deemed compliant. It will not be audited in the 2020 – 2021 period as it is considered closed.	D&C
SWP5 Spill Containment Design		X		X					D	The IREA audited this EPR in November 2019 and it was deemed compliant. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C
SWP6 Management of Chemicals, Fuels, and Hazardous Materials			X	X	X				C	An opportunity for improvement and an observation were raised in May 2020 (May-20_EPR_21, May-20_EPR_22). As agreed on 1 February 2019 observations are to be closed once reported on initially. The opportunity for improvement (May-20_EPR_21) was closed in November 2020.	D&C
SWP7 Surface Water Management During Construction	X		X	X	X				C	An opportunity for improvement and an observation were raised in May 2020 (May-20_EPR_23, May-20_EPR_24). As agreed on 1 February 2019 observations are to be closed once reported on initially. The opportunity for improvement (May-20_EPR_23) remains open.	D&C
SWP8 Use of non-potable water		X	X	X				X	C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
SWP9 Bank Stability		X	X	X	X				C	An opportunity for improvement was raised in May 2020 (May-20_EPR_25) and remains open.	D&C
SWP10 Waterway Modifications		X			X				D, C	An opportunity for improvement was raised in May 2020 (May-20_EPR_26). This was closed in July 2020.	D&C



ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO FEBRUARY 2021)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
SWP11 Flood Levels, Flows and Velocities		X	X	X	X				D, PC, C	An observation was raised in May 2020 (May-20_EPR_27). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
SWP12 Floodplain Storage Capacity		X	X	X	X				D	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
SWP13 Tunnel Portal Flood Risk		X		X					D, O	The IREA audited this EPR in November 2019 and it was deemed compliant. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing.	D&C / OpCo
SWP14 Maintenance of Melbourne water and Other Drainage Assets		X	X	X	X				D	An opportunity for improvement was raised in November 2019 (Nov-19_EPR_06). This was closed in August 2020. The IREA audited this EPR in May 2020 and it was deemed compliant. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing.	D&C
SWP15 North Yarra Main Sewer		X							D	The IREA audited this EPR in February 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 period as it is considered closed.	D&C
TRANSPORT											
TP1 Optimise Design Performance		X						X	D	An opportunity for improvement was raised in February 2020 (Feb-20_EPR_01) and remains open. An observation was raised in February 2021 (Feb-21_EPR_19). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
TP2 Traffic Monitoring			X	X		X			PC, C, O	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C / OpCo
TP3 Traffic Management Plan	X		X	X		X			PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
TP4 Public Transport		X	X	X			X		PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
TP5 Rail operations		X					X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
TP6 Design Standards		X		X		X			D, C	An observation was raised in August 2020 (Aug-20_EPR_28). As agreed on 1 February 2019 observations are to be closed once reported on initially. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing.	D&C
TP7 Traffic Management Liaison Group			X	X		X			PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
TP8 River Navigation		X	X	X			X		C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
TP9 Melbourne Metro Rail Authority Interface						X			C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
WASTE MANAGEMENT											
WMP1 Waste Management	X	X	X	X				X	D, C, O	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C / OpCo

**APPENDIX B - IREA SPECIALIST TEAM**

The formal audits described in this Minister's Report have been undertaken by the lead IREA Environment Auditor, Hilary Chapman and Assistant Environment Auditors, Camilla Freestone, Karen Katagiri and Farzeen Khundkar. The Lead Auditor was supported by a team of specialists, including (but not limited to):

- IREA Construction Lead, Mike Cragg
- IREA Design Lead, Mike Cragg
- IREA Technical Leads for Groundwater, Emily Hepburn
- IREA Technical Lead for Air Quality, Dr Iain Cowan
- IREA Technical Lead for Ecology, Fiona Sutton
- IREA Technical Lead for Soil and Spoil, Dr Dave Adams
- IREA Technical Lead for Noise and Vibration, Mike Dowsett
- IREA Technical Lead for Ground Movement, Stuart Oakey
- IREA Stormwater and Hydrology Lead Design Reviewer, Paul Atkinson
- IREA Technical Lead for Sustainability, Bernadette Fitzgerald.

This report has been reviewed by the IREA Representative, Simon O'Hana.

**APPENDIX C - AUDIT LIMITATIONS**

This report was prepared in accordance with generally accepted consulting practice for audit services. The environmental audit requires the IREA to apply a process of “general overview and reasonable checking” of the Project documentation and Design and Construction activities (as required under the contract between the IREA and Project Co / WGTP MTIA). The audit program is risk-based, targeting those Design and Construction activities with a potential for risk to the environment or to environmental management arrangements. Accordingly, it is possible that not all environmental issues will be examined during each audit. However, the IREA maintains a structured program of audits designed to cover all aspects of the Project and to enable the formation of an opinion on whether there is conformance with the requirements of the Strategy, CEMP (and subordinate documentation), WEMPs, and the EPRs (as applicable).