

# WEST GATE TUNNEL PROJECT

Independent Reviewer and Environmental Auditor  
Final Report for Submission to the Minister for Planning –  
March 2020 to August 2020

# 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 March 2020 to August 2020.

This is the fifth 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, with a slight delay to the March 2020 WEMP audit to enable COVIDSafe management measures to be put in place. All other audits have been conducted as scheduled.

### 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) with the exception of one non-conformance raised against AQP6.

During this reporting period the IREA approved six revised environmental management plans, including the Soil and Spoil Management Plan (SSMP). The approval of the revised SSMP facilitated close-out of previous audit findings, including one non-conformance.

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 improved the close out of audit findings with 27 CEMP findings (five non-conformances and 22 opportunities for improvement) and 35 WEMP findings (11 non-conformances and 24 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 the reporting period.

All outstanding findings from previous reporting periods were closed out.

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 54 EPRs. The majority of EPRs audited during the reporting period were deemed compliant. The findings raised consisted of:

- One non-conformance raised against AQP6.
- Eight opportunities for improvement. These related to ecology, surface water, groundwater, and noise and vibration.
- 11 observations.

The non-conformance raised against AQP6 during the reporting period remains open, as well as one non-conformance from the previous reporting periods. There is a total of two non-conformances and 17 opportunities for improvement remaining open at the end of this reporting period.

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 May 2020 quarterly audit are summarised below:

- No non-conformances were raised during this audit.
- Two opportunities for improvement were raised during this audit. This included one against the Hazardous Substances Management Plan and one against the Water Management Plan. These generally related to targeted training delivery and records.
- Six observations were also raised.

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

- No non-conformances were raised during this audit.
- One opportunity for improvement was raised against the Construction Noise and Vibration Management Plan (CNVMP) relating to the sound power level assumptions used for out of hours works planning.
- Two observations were also raised.

In total there are 14 findings remaining open at the end of this reporting period, comprising two non-conformances and 12 opportunities for improvement. The IREA will continue to work with Project Co / D&C Subcontractor to close out any outstanding non-conformances and opportunities for improvement. Project Co / D&C Subcontractor have made an increased effort to close previous findings over the last six-month reporting period. A number of the audit findings from previous reporting periods remain open and this continues to be of concern.

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 59 findings were raised in this reporting period. These consisted of:

- Five non-conformances
- 24 opportunities for improvement
- 30 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. In total there are 24 WEMP audit findings remaining open, comprising two non-conformances and 22 opportunities for improvement. All findings raised in 2018 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 one non-conformance and eight 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 inadequate or inconsistent:

- Contaminated soil and spoil management and associated documentation.



## West Gate Tunnel Project

- Assessment of environmental aspects such as noise and vibration, dust generation, erosion and sediment runoff.
- 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 Plan
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 fifth 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 are 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. However, based on current health advice from the Department of Health and Human Services to introduce social distancing measures, the Project has decided to temporarily close the Project Information Centre until further notice. There is a number of ways the public can still engage with the Project, including:

- Visiting the Project website at <http://westgatetunnelproject.vic.gov.au/>
- Sending the Project a private message on Facebook Messenger
- 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 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 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.

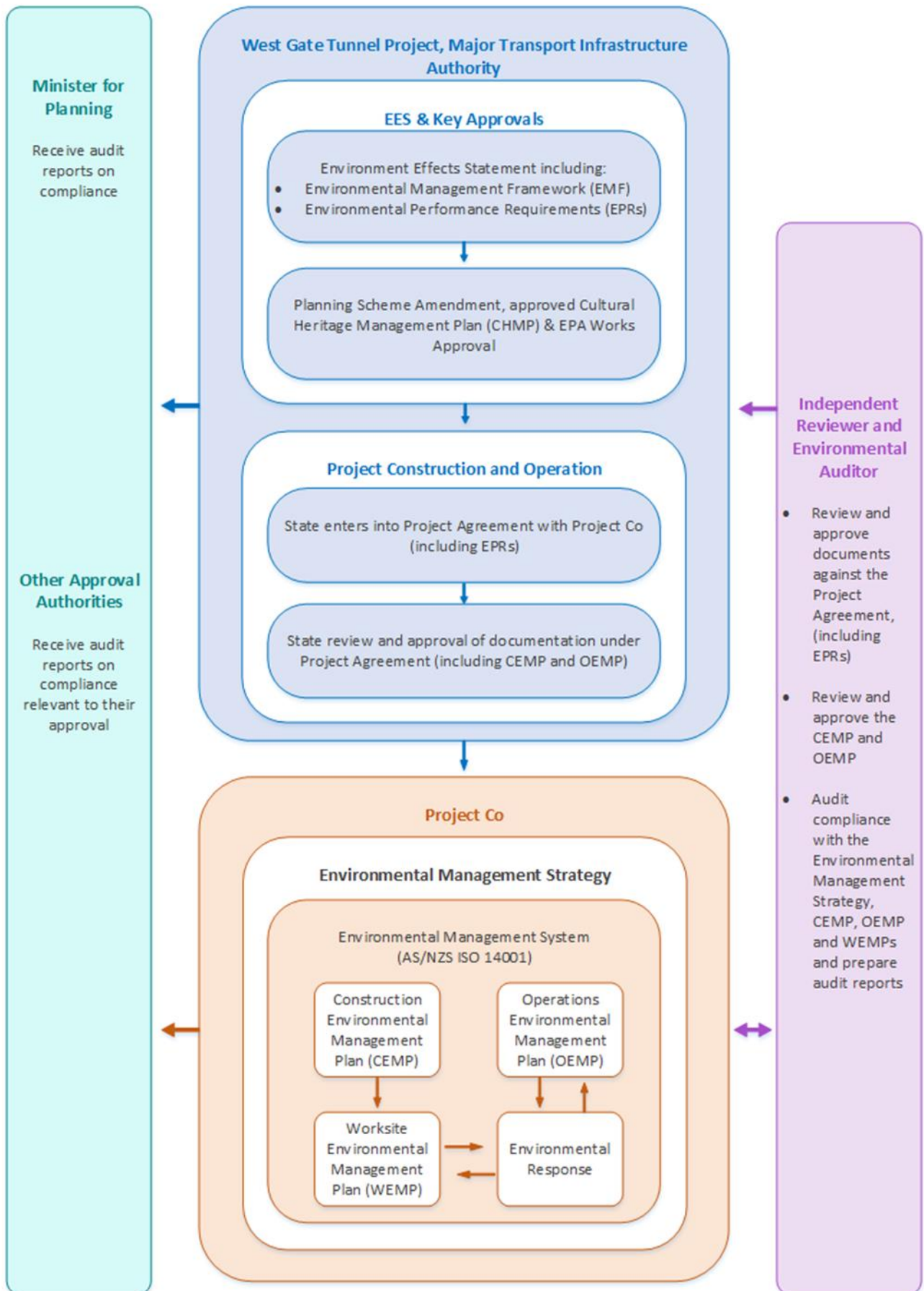


Figure 1 – Governance Framework for the Project Environmental Management Strategy (adapted from Strategy 2018)

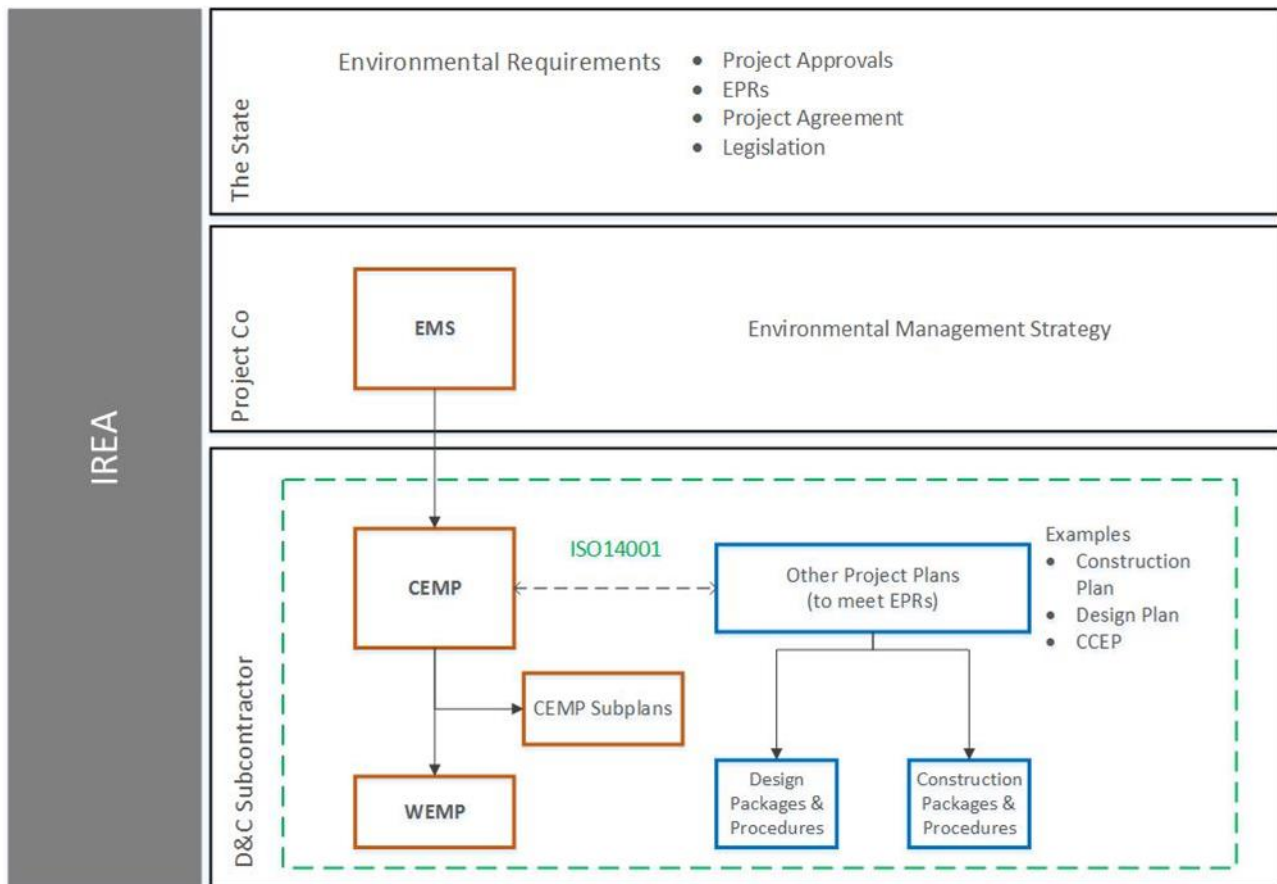


Figure 2 – Relationship between environmental management framework and Project design and construction documentation

### 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 following subplans have also been developed to manage environmental risk associated with D&C Subcontractor activities and to address the requirements of EPRs:

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

Plan	Update status
Construction Environmental Management Plan Rev 10 – 11 December 2019	current
Water Management Plan Rev 10 – 22 October 2019	current
Flora and Fauna Management Plan Rev 12 – 25 October 2019	current
Construction Noise and Vibration Management Plan Rev 10 – 15 January 2020	current
Groundwater Management Plan Rev 11 – 20 February 2020	current
Heritage Management Plan Rev 8 – 31 March 2020	current
Waste Management Plan Rev 11 – 31 March 2020	current
Energy Management Plan Rev 11 – 2 April 2020	current
Hazardous Substances Management Plan Rev 10 – 2 April 2020	current
Lighting Management Plan Rev 11 – 2 April 2020	current
Soil and Spoil Management Plan Rev 12 – 4 August 2020	current
Air Quality Management Plan Rev 9 – 24 October 2019	Rev 10 – under review
Ground Movement Management Plan Rev 8 – 21 August 2019	Rev 9 – under review

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. Design Management Plan, Construction Management Plan, Communications and Community Engagement Plan (CCEP), Construction 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).

<sup>1</sup> Subplan revisions listed in left column are the latest approved revisions by the IREA and the State.



## **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 (fifth) six months of construction between March 2020 – August 2020. 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 Darcy Wall. 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 March 2020 to August 2020 (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, with a slight delay to the March 2020 WEMP audit to enable COVIDSafe management measures to be put in place. All other audits have been conducted as scheduled.

### 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.
- 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, 54 of the 117 EPRs were audited by the IREA. A further 53 EPRs were audited during the previous reporting period (September 2019 – February 2020), bringing the total EPRs audited for this 12-month period to 107. The remaining EPRs not audited include six operational EPRs that are not relevant to construction, as well as one EPR that has been met and three EPRs relating to blasting which are currently outside of the Project’s scope (refer Appendix A).

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

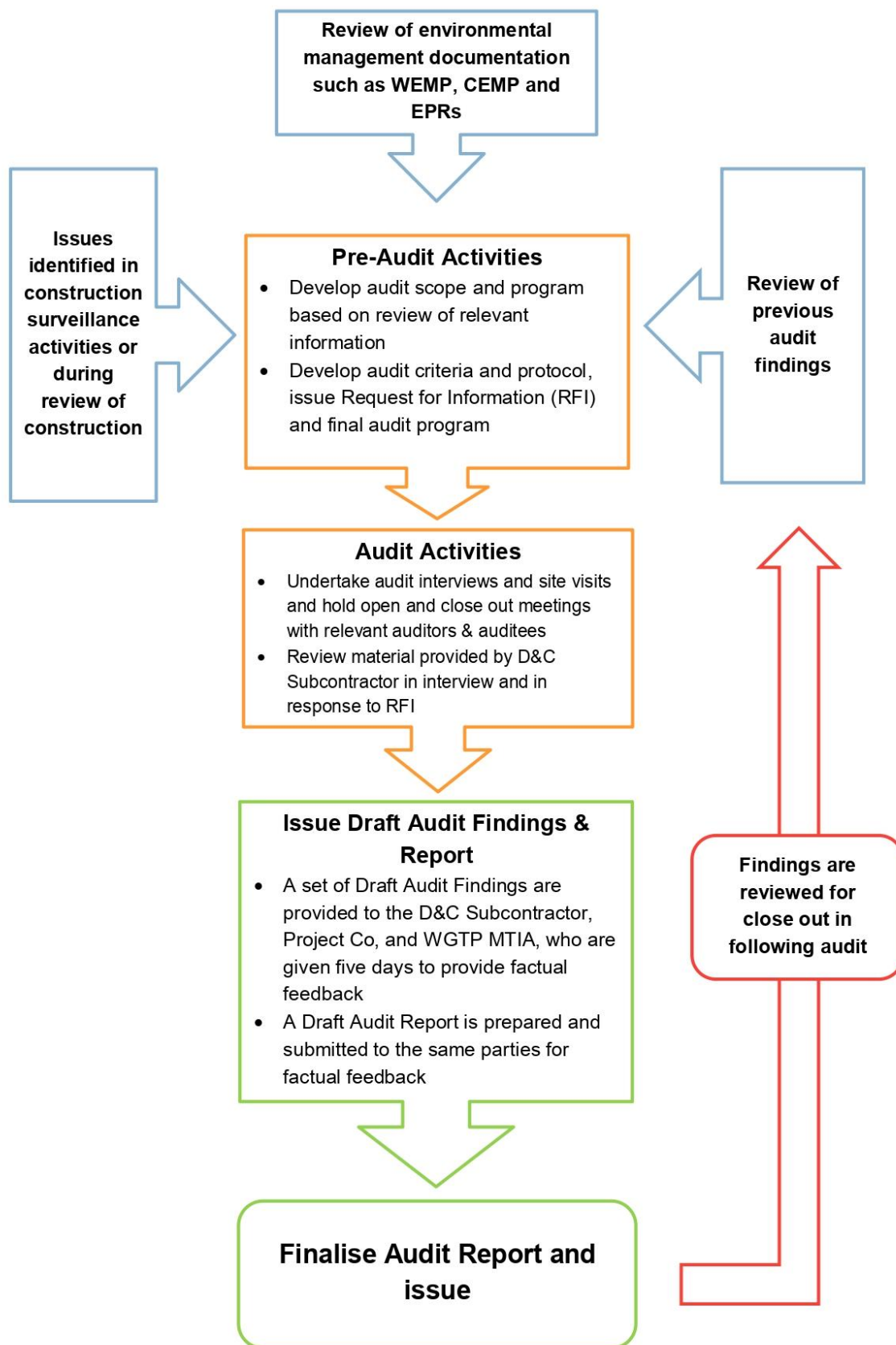


Figure 3 – Overview of environmental audit process

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 – March 2020 to August 2020

Audit Type	Date	Scope
Strategy Audit	August 2020	<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	May 2020 & August 2020	<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	March 2020 West Zone Tunnels Zone East Zone	<ul style="list-style-type: none"> <li>Site audit at West Gate Freeway, Millers Road and Williamstown Road (West Zone), South Portals (Tunnels Zone) and Mackenzie Road (East Zone).</li> </ul>
	April 2020 East Zone	<ul style="list-style-type: none"> <li>Site audit at Maribyrnong River crossing and Mackenzie Road.</li> </ul>
	May 2020 West Zone	<ul style="list-style-type: none"> <li>Site audit at Hyde Street and Ramps.</li> </ul>
	June 2020 West Zone Tunnels Zone East Zone	<ul style="list-style-type: none"> <li>Site audit at South Portal Outbound (Tunnels Zone).</li> </ul>
	July 2020 West Zone Tunnels Zone East Zone	<ul style="list-style-type: none"> <li>Site audit at CityLink Interchange and City Connections (East Zone).</li> </ul>
	August 2020 West Zone	<ul style="list-style-type: none"> <li>Site audit at the West Gate Freeway, Millers Road and Williamstown Road.</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 March 2020 and 31 August 2020, and on findings closed between 1 April 2020 and 30 September 2020. Findings closed between 1 and 31 March 2020 have been included in the previous reporting period (September 2019 – February 2020).

### 2.3.1 Design and Construction Activities – March 2020 to August 2020

The current evaluation by the D&C Subcontractor<sup>2</sup> is that the overall design for the Permanent Works is 98.95% complete based on earned value.

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

- West
  - The focus for the West Zone has been preparing the freeway corridor between Williamstown Road and Kororoit Creek Bridge for the Stage 2 switch. The Stage 2 switch requires shifting the inbound and outbound West Gate Freeway lanes to the north and south verges to enable construction access into the centre median. Works undertaken during this period include all disciplines of civil engineering including and not limited to drainage, pavement subgrade preparation, pavements, traffic barriers, retaining and noise walls, bridge widenings, high voltage transmission re-alignment, campaigns at Grieves Parade and Millers Road for on/off freeway ramps and steel fabrication of the two new pedestrian bridges at Muir Street and Rosala Avenue. Works have proceeded in the Hyde Street area with pile construction for Bridge 30 and installation of new golf nets around Westgate Golf Club.
- Tunnels and Portals
  - The outbound and inbound Tunnel Boring Machine (TBM) launches have been put on hold awaiting resolution of spoil disposal issues. Tunnel precast production for cross passages and back end works are ongoing. North Portal Road Deck to Smoke Duct Level in-situ and precast permanent works not impacted by the TBMs being on hold, and have therefore continued. Ground anchorage works west of the 50% complete Roof Deck have resumed. 90% of Outbound South Portal (OBS) bulk excavation and rock support has been completed and the TBM retrieval pit and Melbourne Fire Brigade (MFB) ramp temporary works will be completed in the next quarter subject to stockpile capacity. OBS permanent base slab and fibre reinforced polymer wall (75% complete) have progressed vertically and eastwards towards the headwall in preparation for a substantial campaign of precast vent and roof level unit installation, followed by topping slabs. The Southern Portal and off-alignment groundwater recharge schemes have been commissioned and are operational where excavation is below ground water level.
- East
  - Works within the Maribyrnong River have progressed with construction of shrouds, tie beams and columns. Demolition of recently acquired properties west of the Maribyrnong River are almost complete. Two large Bridge 50 pile caps alongside McKenzie Road have been constructed allowing the erection of precast columns. Bridge 60 pile cap construction along Footscray Road has progressed with only a handful remaining. Erection of precast columns along Footscray Road has progressed slowly. Assembly of the launching gantry has advanced. The D&C Subcontractor mobilised a 700t crawler crane south of Footscray Road to install Bridge 70 precast columns. Partial displacement piles, bored piles, and pile caps have continued to be installed / constructed at various locations within the CityLink Interchange and Wurundjeri Way areas. CityLink widening works have continued with the installation of steel struts and partial removal of exiting parapets. Pontoons have been installed and commissioned in Moonee Ponds Creek for shared use path diversion north of Dynon Road.

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<sup>2</sup> WGT-100-000-REP-CJH-100-000-0002 Report Date 1 September 2020





*Photo 1 – Launching gantry and precast column works along Footscray Road – East Zone (Source: WGTP MTIA, 19 June 2020)*

## 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 – West Gate Freeway overpass ramp works – West Zone (Source: WGTP MTIA, 30 July 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 the 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

Findings from previous EMS audits in February 2020 were reviewed to determine whether they could be closed out. Of the three open findings, all were closed out.

#### 3.2 Environmental Performance Requirements

The majority of EPRs formally audited during the reporting period was considered compliant, with the exception of one non-conformance raised against AQP6. A number of opportunities for improvement and observations was also raised, noting that the following section focuses on non-conformances and opportunities for improvement only. One non-conformance remains outstanding from a previous reporting period (September 2019 – February 2020), namely against LVP1.

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

Two environmental management EPRs were audited during this period, namely EMP2 and EMP4. Both were deemed compliant.

##### Previous reporting periods

Three opportunities for improvement against EMP2 and EMP4 (two findings) remain open from previous auditing periods.

Refer also to related CEMP findings in Section 3.3.

##### 3.2.2 Air Quality

Five air quality EPRs were audited during the reporting period, namely AQP1, AQP2, AQP3, AQP4 and AQP6.

One non-conformance was raised against AQP6 relating to nine of the fifteen construction air quality monitors being out of calibration. While construction monitoring equipment was away for calibration, the IREA understood that no continuous air quality monitoring was occurring at that location.

AQP1, AQP2, AQP3 and AQP4 were deemed compliant.

### **Previous reporting periods**

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**

Two business EPRs were audited during this reporting period, namely BP5 and BP6. Both were deemed compliant.

### **Previous reporting periods**

The opportunity for improvement raised against BP2 was closed during the reporting period.

Three opportunities for improvement remain open against BP3 and BP5 (two findings) from previous reporting periods.

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

## **3.2.4 Cultural Heritage**

Six cultural heritage EPRs were audited during this period, namely CHP1, CHP2, CHP3, CHP7, CHP8 and CHP9. One observation was raised against CHP7 as the Heritage Interpretation Strategy has not yet been finalised.

CHP1, CHP2, CHP3, CHP8 and CHP9 were deemed compliant.

### **Previous reporting periods**

The opportunity for improvement raised against CHP1 was closed during the reporting period.

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**

No contaminated soil and spoil management EPRs were audited during the reporting period.

### **Previous reporting periods**

One opportunity for improvement raised against CSP2 remains open from previous auditing periods.

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





Photo 3 – South Portal Outbound bulk excavation (Tunnel Zone) (Source: WGTP MTIA, 30 July 2020)

### 3.2.6 Ecology

Five ecology EPRs were audited during the reporting period, namely EP1, EP2, EP4, EP5 and EP7.

One opportunity for improvement and one observation were raised against EP5. The opportunity for improvement was raised as the D&C Subcontractor did not provide evidence of consultation with Melbourne Water for the City Link and City Connections landscape design package. This finding was closed during the period following provision of evidence of consultation with Melbourne Water. The observation was raised in relation to close-out of review comments from City of Maribyrnong Council and Friends of Stony Creek associated with the Hyde Street Ramps and Associated Works landscape design package.

EP1, EP2, EP4 and EP7 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 the reporting period, namely GGP1. It was deemed compliant.

#### Previous reporting periods

Two opportunities for improvement raised against GGP2 were closed during the reporting period.

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

No ground movement EPRs were audited during the reporting period.

#### 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

Five groundwater EPRs were audited during the reporting period, namely GWP1, GWP2, GWP4, GWP5 and GWP6.

One opportunity for improvement was raised against GWP1 as the Groundwater Management Plan (GWMP) does not adequately address the management of groundwater outside of the Tunnels Zone. Specifically, it does not address the groundwater context in the East Zone with regards to how groundwater is being managed.

GWP2, GWP4, GWP5 and GWP6 were deemed compliant.

#### Previous reporting periods

One opportunity for improvement raised against GWP2 was closed during the reporting period.

No findings remain open from previous reporting periods.

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

### 3.2.10 Land Use

Three land use EPRs were audited during this period, namely LPP1, LPP3 and LPP4. All were deemed compliant.

#### Previous reporting periods

No findings remain open from previous reporting periods.

### 3.2.11 Landscape and Visual

One landscape and visual EPR was audited during this audit period, namely LVP1. It was deemed compliant.

#### Previous reporting periods

One non-conformance raised against LVP1 remains open from previous reporting periods.

### 3.2.12 Noise and Vibration

Nine noise and vibration EPRs were audited during this reporting period, namely NVP1, NVP2, NVP4, NVP5, NVP7, NVP8, NVP10, NVP14, and NVP18. Two opportunities for improvement and four observations were raised against the following:

- One opportunity for improvement against NVP8 as the permitted working hours in the Out of Hours Work Permit audited were not clear. The D&C Subcontractor's intent was to allow concreting and pavement works to occur during the evening period, with only concreting works to occur in the night period, however this was not clearly set out in the permit.
- One opportunity for improvement was raised against NVP18 as it was not clear how the D&C Subcontractor had reviewed noise monitoring data for works completed under an Out of Hours work permit, or identified and implemented any required further management measures.



- One observation against NVP5 due to permanent noise walls not being installed in advance of adjacent construction works at the time of the audit. This was reported to be as a result of design and materials flaws.
- One observation against NVP7 relating to the noise monitoring cited in the D&C Subcontractor monthly environmental monitoring reports not aligning with the data outputs attached in the appendices of the same report for the West Zone.
- One observation against NVP8 relating to an Out of Hours works permit not yet being closed out four weeks after the completion of the works.
- One observation against NVP10 because a vibration exceedance non-conformance was raised by the D&C Subcontractor in July 2020 and at the time of the audit (August 2020) the non-conformance investigation report was not yet available.

NVP1, NVP2, NVP4 and NVP14 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 and tunnelling, which does not currently relate to the scope of the Project. These inactive EPRs are NVP9, NVP12, NVP16 and NVP17.

### Previous reporting periods

One non-conformance raised against NVP10 and four opportunities for improvement raised against NVP7 (two findings), NVP8 and NVP10 were closed during the reporting period.

One opportunity for improvement raised against NVP8 remains open from previous reporting periods.

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



Photo 4 – Permanent noise wall installation on West Gate Freeway – West Zone (Source: WGTP MTIA, 30 July 2020)

### 3.2.13 Social

Two social EPRs were audited during the reporting period, namely SP1 and SP2. Both were deemed compliant.

#### Previous reporting periods

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

### 3.2.14 Surface Water

Eight surface water EPRs were audited during the reporting period, namely SWP1, SWP6, SWP7, SWP9, SWP10, SWP11, SWP12 and SWP14. Four opportunities for improvement and four observations were raised against the following:

- One opportunity for improvement against SWP6 relating to the adequacy and maintenance of bund capacity for storage of hazardous substances.
- One opportunity for improvement against SWP7 as the D&C Subcontractor did not provide evidence of a flood management plan to address works at Kororoit Creek, Maribyrnong River and Moonee Ponds Creek.
- One opportunity for improvement against SWP9 as the D&C Subcontractor did not provide evidence of consultation with council relating to upcoming works on Moonee Ponds Creek bank.
- One opportunity for improvement against SWP10 as the D&C Subcontractor did not provide evidence of consultation with councils relating to upcoming works on Stony Creek. This finding was closed following provision of relevant evidence.
- One observation against SWP1 as the Water Sensitive Road Design has not yet been finalised.
- One observation against SWP6 as the D&C Subcontractor did not provide evidence of hydrocarbon contaminated material being disposed of in accordance with the EPR.
- One observation against SWP7 relating to spoil stockpiles being stored within the 1% Annual Exceedance Probability (AEP) zone adjacent to Stony Creek.
- One observation against SWP11 as the evidence provided did not appear to address the EPR requirement relating to impacts on underground SP AusNet electricity or gas assets.

SWP12 and SWP14 were deemed compliant.

#### Previous reporting period

The opportunity for improvement raised against SWP14 was closed during the reporting period.

No findings remain open from previous reporting periods.

Refer also to Water Management Plan findings in Section 3.3.12.

### 3.2.15 Transport

Five transport EPRs were audited this reporting period, namely TP2, TP3, TP6, TP7 and TP9.

One observation was raised against TP6 because the D&C Subcontractor was unable to demonstrate how a design package had been assessed as continuing to comply with TP6 requirements following a design update.

TP2, TP3, TP7 and TP9 were deemed compliant.

#### Previous reporting periods

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

### 3.2.16 Waste Management

WMP1 was not audited during the reporting period.

#### 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 May 2020 audit the following management plans and sections were audited:

- CEMP (Element 3 Legal and Other Requirements and Element 12 Auditing, Review and Improvement).
- Air Quality Management Plan (Section 6 Monitoring and Section 7 Communication and Consultation).
- Construction Communications and Community Engagement Plan (Appendix B – Policies and Procedures – Policies Five and Seven).
- Hazardous Substances Management Plan (Section 4 Management Measures and Section 5 Monitoring and Reporting).
- Water Management Plan (Section 5.1 Sediment and Erosion Management, Section 5.7 Typical Water Management Controls and Table 5.6 Water Management Controls – Erosion, Sediment, Stockpiles, Batters).

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

- CEMP (Element 1 Leadership, Accountability and Culture and Element 8 Subcontractor Relationships).
- Business Involvement Plan (Section 2 Project Overview and Section 3 Approach to Business Involvement).
- Construction Noise and Vibration Management Plan (Section 5 Management and Section 6 Monitoring and Report).
- Flora and Fauna Management Plan (Section 5 Management Measures).
- Groundwater Management Plan (Section 4 Hydrogeological Model, Section 5 Monitoring, Section 6 Groundwater Impact Mitigation Measures and Section 7 Trigger Values).
- Heritage Management Plan (Historic Places and Archaeological Management Plan / Section 5 – Archaeological Management Plan).

### Current Reporting Period

Two observations were raised against the CEMP, one against outdated environmental incident data in the monthly environment report, and one against the 2020 management review not being complete at the time of the audit in May 2020.

### Previous Reporting Periods

Two non-conformances and six opportunities for improvement raised against the CEMP were closed during the reporting period.

Two non-conformances and six opportunities for improvement remain open from previous reporting periods.



### 3.3.1 Air Quality Management Plan

Two observations were raised against the Air Quality Management Plan (AQMP) during this reporting period. One observation related to not all construction Aeroqual monitoring historical data being corrected to accord with the Australian Standard and potentially resulting in under-reporting of exceedances. The other observation related to the review and recording of the monthly environmental monitoring data.

#### 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

One opportunity for improvement and one observation were raised against the Construction Noise and Vibration Management Plan (CNVMP) during this reporting period. The opportunity for improvement was raised as the D&C Subcontractor did not provide the justification for the lower sound power levels applied for construction equipment in the noise modelling for out of hours works planning. The observation related to the accuracy of the equipment usage factor correction used on modelling for an Out of Hours Work Permit.

#### Previous reporting periods

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

One opportunity for improvement remains 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

One observation was raised against the Fauna and Flora Management Plan (FFMP) during the reporting period. The observation related to the site practices implemented by the D&C Subcontractor to identify trees that have been assessed and trees requiring assessment are not aligned with the process described in the FFMP. The controls in the FFMP were not consistent with the on-site practices.

#### Previous reporting periods

One non-conformance raised against the FFMP was closed during the reporting period.

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

The Ground Movement Management Plan (GMMP) was not specifically audited 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**

No adverse findings were raised against the Groundwater Management Plan (GWMP) 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**

One opportunity for improvement and one observation were raised against the Hazardous Substances Management Plan (HSMP) during this reporting period. The opportunity for improvement was raised as the D&C Subcontractor did not provide evidence of a toolbox talk on hazardous substances management and controls delivered for the West Zone teams. This finding was closed following provision of evidence of toolbox talk on hazardous materials storage / spills delivered for the relevant teams. The observation was raised as the D&C Subcontractor did not provide a response in relation to the adequacy and capacity of the bunded area to contain the spill that occurred on a hardstand area in the East Zone.

Refer to Section 3.2.14 for findings relating to hazardous substances EPRs.

#### **Previous reporting periods**

This was the first time the HSMP had been audited, therefore there are no open findings from previous reporting periods.

### **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**

The Lighting Management Plan (LMP) was not specifically audited during this reporting period.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

### **3.3.10 Soil and Spoil Management Plan**

The Soil and Spoil Management Plan (SSMP) was not specifically audited during this reporting period.

#### **Previous reporting periods**

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

One opportunity for improvement remains open from previous reporting periods.

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



*Photo 5 – Excavation at Inbound Portal – Tunnels Zone (Source: WGTP MTIA, 30 July 2020)*

### 3.3.11 Waste Management Plan

The Waste Management Plan (WstMP) was not specifically audited during this reporting period.

#### 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

An opportunity for improvement was raised against the Water Management Plan (WMP) during this reporting period. This was raised as no sediment and erosion control toolbox talks had been specifically delivered for the Stony Creek or the Bridge 74 site teams despite works at these two locations having been ongoing in the vicinity of watercourses for more than six months, and four months respectively.

#### Previous reporting periods

One non-conformance and one opportunity for improvement raised against the WMP were closed during the reporting period.

No findings remain open from previous reporting periods.

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

### 3.3.13 Landscape Management Plan

The Landscape Management Plan (LdMP) was not specifically audited during this reporting period.

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

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

### 3.3.14 Business Involvement Plan

No adverse findings were raised against the Business Involvement Plan (BIP) 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

One observation was raised against the Construction Communications and Community Engagement Plan (CCCEP) during the reporting period. This related to the difference between ambient air quality monitoring data and construction air quality monitoring data and how this is communicated to the stakeholders.

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

This was the first time the CCCEP had been audited, therefore there are no open findings from previous reporting periods.

## 3.4 Worksite Environmental Management Plan

WEMP audits are conducted on a monthly basis, with six WEMP audits conducted during the reporting period. A total of 59 findings were raised in this reporting period compared to 37 in the previous reporting period. Findings raised during this reporting period comprised:

- Five non-conformances
- 24 opportunities for improvement
- 30 observations.

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

- Mud and dirt tracked on to public roads at site egress exit points in the West and East Zones.
- Annual calibration of air quality and noise monitoring equipment in the East Zone.
- Environmental incidents or non-conformances in the West Zone not raised in the Project's incident management system.
- Management of contaminated soil stockpiles in the West, Tunnels and East Zones.
- Management of spoil stockpiles in the West Zone.

Of all WEMP findings:

- 37% related to environmental management and were administrative in nature
- 30% related to soil and spoil and surface water management
- 14% related to air quality management
- 14% related to ecological management
- 5% related to noise and vibration and groundwater.

These figures are a reflection of the targeted WEMP audits conducted in this reporting period. The IREA focused the WEMP audits on the D&C Subcontractor activities relating to management of:

- Air quality and dust control
- Soil and spoil management
- Vegetation controls.

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 29 non-conformances and opportunities for improvement raised in this reporting period nine have been closed.

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

The reporting period saw an increase in the number of findings compared to the previous reporting period. This increase is also reflected in the total of WEMP audit findings remaining open. In total there are 24 outstanding findings, comprising two non-conformances and 22 opportunities for improvement.

### 3.4.1 West Zone

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

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

Three non-conformances were raised during WEMP audits of the West Zone:

- One against mud tracking onto the public road at a site egress. This finding was closed following installation of rumble grids at site egress points.
- One against spoil stockpile management. This finding was closed following provision of relevant evidence.
- One against reporting of environmental incidents or non-conformances relating to spoil management and erosion and sediment control.

14 opportunities for improvement were raised:

- Four relating to environmental management issues. One of these findings was closed following provision of relevant evidence.
- Three relating to contaminated soil and spoil management. One of these findings was closed following provision of relevant evidence.
- Three relating to air quality monitoring and implementation of dust control measures. One of these findings was closed following provision of relevant evidence.
- Two relating to weed management and incomplete documentation associated with clearing of vegetation.
- One relating to surface water monitoring. This finding was closed following provision of relevant evidence.
- One relating to tracking and disposal of groundwater.

16 observations were also raised.

Of the 33 findings raised during this period, one non-conformance and ten opportunities for improvement raised during the reporting period remain open.



### Previous reporting periods

Four non-conformances and nine opportunities for improvement raised against West Zone WEMPs from previous reporting periods were closed during the reporting period.

Four 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.

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

One non-conformance was raised related to maintenance of contaminated soil stockpiles at South Portal Outbound. This was closed following provision of relevant evidence.

Two opportunities for improvement were raised against contaminated soil and spoil management, specifically relating to covering of contaminated soil stockpile and evidence of documentation provided to the landfill for disposal of soil.

Ten observations were raised.

Of the 13 findings raised during this period, two opportunities for improvement remain open.

### Previous reporting periods

Four non-conformances and nine 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.



Photo 6 – South Portal Outbound works – Tunnel Zone (Source: WGTP MTIA, 30 July 2020)

### **3.4.3 East Zone**

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

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

One non-conformance was raised relating to expired annual calibration certificates of air quality and noise monitoring equipment across the East Zone.

Eight opportunities for improvement were raised:

- Four against contaminated soil and spoil management and associated documentation.
- Three related to environmental management issues. Two of these findings were closed following provision of relevant evidence.
- One against vegetation management.

Four observations were raised.

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

#### **Previous reporting periods**

No WEMP audit findings raised against East Zone WEMPs remain open from previous reporting periods.

## 4 AUDIT CONCLUSIONS

### Environmental Management Strategy

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

All outstanding findings from previous reporting periods were closed out.

### Environmental Performance Requirements

During the last six-month reporting period the IREA formally audited 54 EPRs. The majority of EPRs audited during the reporting period were deemed compliant. The findings raised consisted of:

- One non-conformance raised against AQP6.
- Eight opportunities for improvement. These related to ecology, surface water, groundwater, and noise and vibration.
- 11 observations.

The non-conformance raised against AQP6 during the reporting period remains open, as well as one non-conformance from the previous reporting periods. There is a total of two non-conformances and 17 opportunities for improvement remaining open at the end of this reporting period.

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 May 2020 quarterly audit are summarised below:

- No non-conformances were raised during this audit.
- Two opportunities for improvement were raised during this audit. This included one against the Hazardous Substances Management Plan and one against the Water Management Plan. These generally related to targeted training delivery and records.
- Six observations were also raised.

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

- No non-conformances were raised during this audit.
- One opportunity for improvement was raised against the Construction Noise and Vibration Management Plan (CNVMP) relating to the sound power level assumptions used for out of hours works planning.
- Two observations were also raised.

In total there are 14 findings remaining open at the end of this reporting period, comprising two non-conformances and 12 opportunities for improvement. The IREA will continue to work with Project Co / D&C Subcontractor to close out any outstanding non-conformances and opportunities for improvement. Project Co / D&C Subcontractor have made an increased effort to close previous findings over the last six-month reporting period. A number of the audit findings from previous reporting periods remain open and this continues to be of concern.

### Worksite Environment Management Plans

During the reporting period six WEMP audits were conducted. A total of 59 findings were raised in this reporting period. These consisted of:

- Five non-conformances
- 24 opportunities for improvement
- 30 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. In total there are 24 WEMP audit findings remaining open, comprising two non-conformances and 22 opportunities for improvement. All findings raised in 2018 were closed.

## **Conclusions**

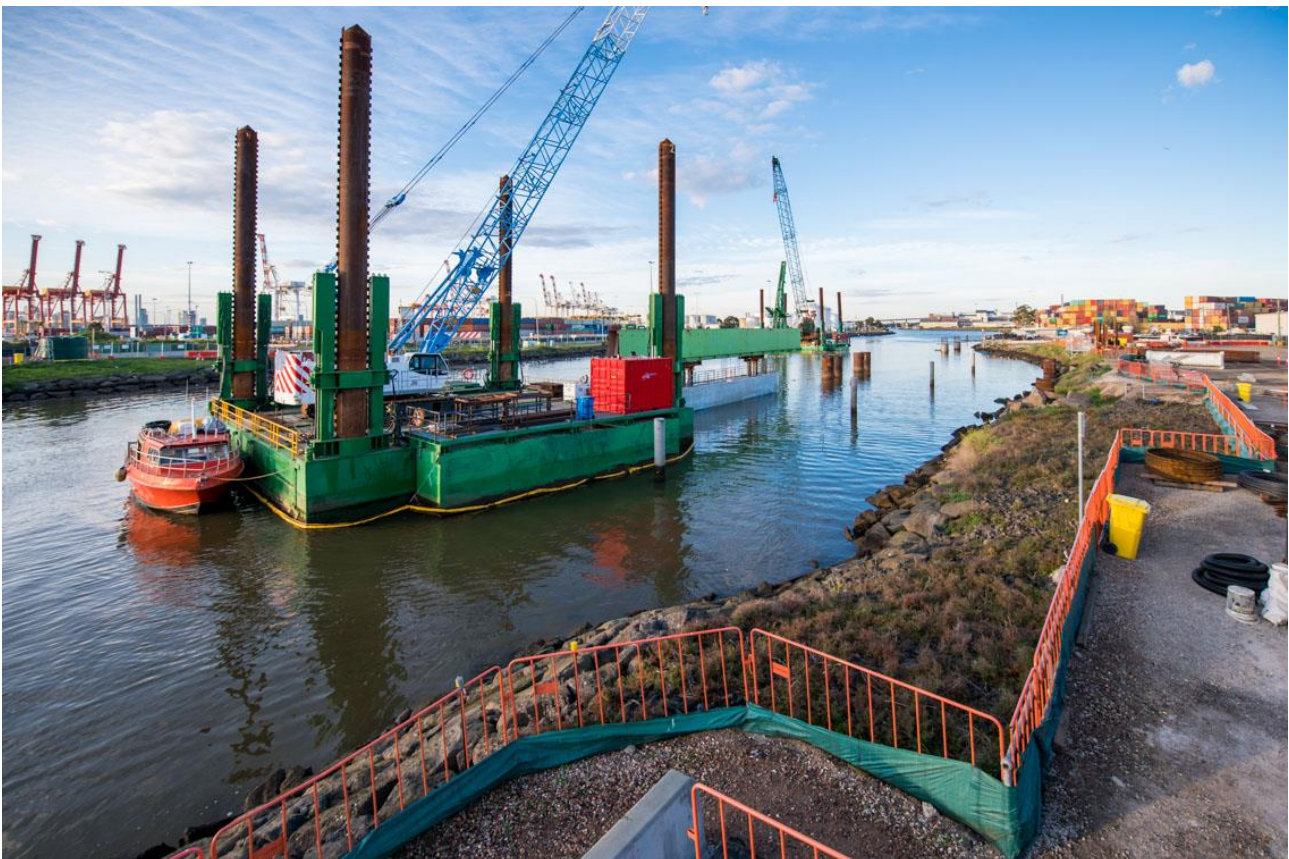
The findings arising from the reporting period by the IREA have not identified any immediate significant or material risks to the environment.

Implementation of the EPRs was found to be generally compliant, with one non-conformance and eight 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 inadequate or inconsistent:

- Contaminated soil and spoil management and associated documentation.
- Assessment of environmental aspects such as noise and vibration, dust generation, erosion and sediment runoff.
- 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, 19 June 2020)*

**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 AUGUST 2020)	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) and remains open. 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 2020 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				D, O	The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C / OpCo
AQP3 In Tunnel Air Quality		X			X				D, O	The IREA audited this EPR in May 2020, and it was deemed compliant.	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	The IREA audited this EPR in May 2020 and a non-conformance was raised (May-20_EPR_07) and remains open.	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 2019 and it was deemed compliant.	D&C
BP2 Access and Amenity for Business and Commercial Facilities		X	X	X			X		D, C	The IREA audited this EPR in November 2019 and an opportunity for improvement was raised (Nov-19_EPR_02). This was closed in August 2020.	D&C
BP3 Screening		X	X	X			X		C	The IREA audited this EPR in February 2020 and an opportunity for improvement was raised (Feb-20_EPR_09) 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 2019 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, while noting the previous findings still remain open.	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

ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO AUGUST 2020)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
BP7 Gas Utilities		X	X	X			X		D, C	The IREA audited this EPR in August 2019 and it was deemed compliant.	D&C
BP8 Business Disruption		X	X	X				X	D, C	The IREA audited this EPR in February 2020 and it was deemed compliant.	D&C
BP9 Business Acquisition Process		X	X	X			X		D, C	The IREA audited this EPR in November 2019 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 November 2019 and it was deemed compliant.	D&C
CHP5 Archival Photographic Records		X						X	PC	The IREA audited this EPR in August 2019 and it was deemed compliant.	D&C
CHP6 Port Phillip Monument		X						X	D, C	The IREA audited this EPR in August 2019 and it was deemed compliant.	D&C
CHP7 Heritage Interpretation Strategy	X	X				X			PC, C	The IREA audited this EPR in August 2020 and an observation was raised (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 compliant.	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 2019 and it was deemed compliant.	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 2020 and it was deemed compliant.	D&C
CONTAMINATED SOIL AND SPOIL MANAGEMENT											
CSP1 Contaminated Soil Requirements	X	X	X	X	X		X		C	The IREA audited this EPR in May 2019 and an opportunity for improvement was raised (May-19_EPR_09). This was closed in May 2020.	D&C
CSP2 Contaminated Soil and Spoil Management	X	X	X	X	X		X		PC, C	The IREA audited this EPR in August 2018 and an opportunity for improvement was raised (Aug-18_EPR_09) and remains open.	D&C
CSP3 Acid Sulphate Soil	X		X	X			X		PC, C	The IREA audited this EPR in November 2019 and it was deemed compliant.	D&C
CSP4 Odour Management	X		X	X			X		C	The IREA audited this EPR in November 2019 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 2020 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 AUGUST 2020)	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 2019 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	The IREA audited this EPR in August 2018 and August 2019, with two opportunities for improvement raised (Aug-18_EPR_12, Aug-19_EPR_02). These findings were closed in August 2020 and June 2020 respectively.	D&C
GROUND MOVEMENT											
GMP1 Geotechnical Model and Assessment		X	X	X			X		PC, C	The IREA audited this EPR in May 2019 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 2020 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 May 2019 and it was deemed compliant.	D&C / OpCo
GMP4 Settlement Criteria for Utilities		X	X	X				X	PC	The IREA audited this EPR in August 2019 and it was deemed compliant.	D&C
GMP5 Ground Movement Monitoring	X	X	X	X			X		PC, C, O	The IREA audited this EPR in May 2019 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 November 2019 and it was deemed compliant.	D&C / OpCo
GROUNDWATER											
GWP1 Groundwater Management Measures	X	X	X	X		X			PC, C, O	The IREA audited this EPR in August 2020 and an opportunity for improvement was raised (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	The IREA audited this EPR in February 2020 and an observation was raised. As agreed on 1 February 2019 observations are to be closed once reported on initially.	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 2020 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 2020 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

ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO AUGUST 2020)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
LPP5 Public Land		X	X	X				X	D, C	The IREA audited this EPR in February 2020 and it was deemed compliant.	D&C
LANDSCAPE AND VISUAL											
LVP1 Urban Design Approach		X	X	X		X			D, C	A non-conformance was raised in February 2020 and (Feb-20_EPR_15) and remains open. 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 November 2019 and it was deemed compliant.	D&C
LVP3 Light Spillage	X	X	X	X			X		D, C	The IREA audited this EPR in November 2019 and it was deemed compliant.	D&C
LVP4 Vegetation Screening		X					X		C	The IREA audited this EPR in February 2020 and it was deemed compliant.	D&C
LVP5 Design Review							X		D	The IREA audited this EPR in February 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	The IREA audited this EPR in May 2020 and an observation was raised (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	Based on Project status this 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	The IREA audited this EPR in August 2020 and an observation was raised (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	An opportunity for improvement was raised in May 2019 (May-19_EPR_24) and remains open. The IREA audited this EPR in August 2020 and a new opportunity for improvement was raised (Aug-20_EPR_21) and remains open. An observation was also raised in August 2020 (Aug-20_EPR_22). As agreed on 1 February 2019 observations are to be closed once reported on initially.	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. The IREA audited this EPR in August 2020 and an observation was raised (Aug-20_EPR_23). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C



ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO AUGUST 2020)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
NVP11 Construction Vibration Targets (Structures)			X	X			X		C	The IREA audited this EPR in August 2019 and it was deemed compliant.	D&C
NVP12 Ground-borne (Internal) Noise Targets								X	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 August 2019 and it was deemed compliant.	D&C
NVP14 Tunnel Ventilation System Noise Design					X				D, O	The IREA audited this EPR in May 2020 and it was deemed compliant.	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	The IREA audited this EPR in August 2020 and an opportunity for improvement was raised (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 and closed.	WGTP MTIA
SOCIAL											
SP 1 Urban Design Principles and Vision		X				X			D	The IREA audited this in August 2020 and it was deemed compliant.	D&C
SP2 Communications and Community Engagement Plan (CCEP)	X		X	X	X				PC, C, O	The IREA audited this EPR in May 2019 and two opportunities for improvement were raised (May-19_EPR_26, May-19_EPR_27), and remain open. The IREA audited this in May 2020 and it was deemed compliant.	D&C / OpCo
SP3 Community Liaison Group Participation							X		C	The IREA audited this EPR in May 2019 and it was deemed compliant.	D&C / WGTP MTIA
SP4 Social and Local Procurement	X							X	PC, C	The IREA audited this EPR in February 2020 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 2019 and it was deemed compliant.	WGTP MTIA
SURFACE WATER											
SWP1 Design of Discharges and Runoff		X			X				D	The IREA audited this EPR in May 2020 and an observation was raised (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				X	PC	The IREA audited this EPR in February 2020 and it was deemed compliant.	D&C
SWP4 Water Quality Monitoring	X		X	X					PC	The IREA audited this EPR in August 2018 and it was deemed compliant and closed.	D&C
SWP5 Spill Containment Design		X					X		D	The IREA audited this EPR in November 2019 and it was deemed compliant.	D&C
SWP6 Management of Chemicals, Fuels, and Hazardous Materials			X	X	X				C	The IREA audited this EPR in May 2020 and an opportunity for improvement and an observation were raised (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) remains open.	D&C
SWP7 Surface Water Management During Construction	X		X	X	X				C	The IREA audited this EPR in May 2020 and an opportunity for improvement and an observation were raised (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

ENVIRONMENTAL PERFORMANCE REQUIREMENTS	REVIEW & SURVEILLANCE				AUDIT				PHASE	PROJECT AND AUDIT STATUS (MARCH 2020 TO AUGUST 2020)	RESPONSIBLE PARTY
	MP	DR	CR	CS	May -20	Aug -20	Nov -20	Feb -21			
SWP8 Use of non-potable water		X	X	X				X	C	The IREA audited this EPR in February 2020 and an observation was raised. As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
SWP9 Bank Stability		X	X	X	X				C	The IREA audited this EPR in May 2020 and an opportunity for improvement was raised (May-20_EPR_25) and remains open.	D&C
SWP10 Waterway Modifications		X			X				D, C	The IREA audited this EPR in May 2020 and an opportunity for improvement was raised (May-20_EPR_26). This was closed in July 2020.	D&C
SWP11 Flood Levels, Flows and Velocities		X	X	X	X				D, PC, C	The IREA audited this EPR in May 2020 and 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.	D&C / OpCo
SWP14 Maintenance of Melbourne water and Other Drainage Assets		X	X	X	X				D	The IREA audited this EPR in August 2020 and an opportunity for improvement was raised (Nov-19_EPR_06). This was closed in August 2020. The IREA audited this EPR in May 2020 and it was deemed compliant.	D&C
SWP15 North Yarra Main Sewer		X							D	The IREA audited this EPR in February 2019 and it was deemed compliant and closed.	D&C
TRANSPORT											
TP1 Optimise Design Performance		X						X	D	The IREA audit this EPR in February 2020 and an opportunity for improvement was raised (Feb-20_EPR_01) and remains open.	D&C
TP2 Traffic Monitoring			X	X		X			PC, C, O	The IREA audited this 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 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 February 2020 and it was deemed compliant.	D&C
TP5 Rail operations		X					X		D, C	The IREA audited this EPR in February 2020 and it was deemed compliant.	D&C
TP6 Design Standards		X				X			D, C	The IREA audited this EPR in August 2020 and an observation was raised (Aug-20_EPR_28). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
TP7 Traffic Management Liaison Group			X	X		X			PC, C	The IREA audited this 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 2019 and an observation was raised (Nov-19_EPR_22). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
TP9 Melbourne Metro Rail Authority Interface						X			C	The IREA audited this 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 2020 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 Darcy Wall. The Lead Auditor was supported by a team of specialists, including (but not limited to):

- IREA Construction Lead, Mike Cragg
- IREA Design Lead, Damien Kennedy
- 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).