

# WEST GATE TUNNEL PROJECT

Independent Reviewer and Environmental Auditor  
Final Report for Submission to the Minister for Planning –  
March 2021 to August 2021

# WEST GATE TUNNEL PROJECT

## Independent Reviewer & Environmental Auditor

Final Audit Report for Minister of Planning

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## EXECUTIVE SUMMARY

### Introduction

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

This is the seventh 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 and western portion of the Project.

Multiple COVID-19 pandemic state of emergencies occurred during the reporting period, May 2021 to June 2021, July 2021, and August 2021 onwards. Construction continued during the state of emergencies, with the IREA completing all required environmental audits and continued surveillances. The IREA undertook COVIDSafe work practices and protocols in line with prevailing Victorian Government health advice.

### Overview of Findings

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

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

During this reporting period the IREA approved four revised environmental management plans, including the Lighting Management Plan (LMP), Energy Management Plan (EMP), Heritage Management Plan (HMP), and Flora and Fauna Management Plan (FFMP).

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

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

### Environmental Management Strategy

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

No findings remain open from previous reporting periods.

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

### Environmental Performance Requirements

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

- One non-conformance relating to groundwater management. This was raised from a previous opportunity for improvement finding, refer to Section 3.2.9.
- Two opportunities for improvement. These related to surface water and traffic management.
- Five observations were also raised.

One opportunity for improvement from previous reporting periods was closed, while one opportunity for improvement was raised to a non-conformance as mentioned above. In total there are 17 findings remaining open at the end of this reporting period, comprising one non-conformance and 16 opportunities for improvement.

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

### **Construction Environmental Management Plan**

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

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

- One non-conformance was raised during this audit, relating to air quality monitoring requirements outlined in the Air Quality Management Plan.
- No opportunities for improvement were raised.
- Four observations were also raised.

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

- No non-conformances were raised during this audit.
- Two opportunities for improvement were raised. This included one against the CEMP relating to subcontractor audit finding close out, and one against the Ground Movement Management Plan regarding data accessibility to Project Parties.
- Two observations were also raised.

One non-conformance and one opportunity for improvement from previous reporting periods were closed. In total there are 15 findings remaining open at the end of this reporting period, comprising one non-conformance and 14 opportunities for improvement. The IREA will continue to work with Project Co / D&C Subcontractor to close out any outstanding findings.

Details of the CEMP findings are listed in Section 3.3.

### **Worksite Environment Management Plans**

During the reporting period six WEMP audits were conducted. A total of 14 findings were raised in this reporting period. These consisted of:

- No non-conformances.
- Four opportunities for improvement.
- Ten observations.

The D&C Subcontractor has improved their system processes and environmental management on site, resulting in the reduction of new audit findings from 34 findings in the previous reporting period to 14 during this reporting period. One non-conformance and six opportunities for improvement were closed during this reporting period. In total there are 17 WEMP audit findings remaining open, comprising one non-conformance and 16 opportunities for improvement. All findings raised between March 2018 and October 2019 were closed.

The WEMP findings are further detailed in Section 3.4.

### **Conclusions**

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

Implementation of the EPRs was found to be generally compliant, with one non-conformance and two 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:

- Groundwater management and associated documentation.



## West Gate Tunnel Project

- Air quality monitoring calibration and air quality trigger alerts.
- Surface water management to minimise potential impacts.
- Soil and spoil tracking documentation for the Tunnel Zone
- Evidence of close-out actions for a subcontractor's audit findings.
- Monitoring of traffic restrictions and vehicle movements.
- Accessibility of ground movement monitoring data to Project Parties.

Progress in closing out audit findings has remained steady. The IREA encourages continued efforts by Project Co and the D&C Subcontractor to close out remaining open 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
EPA	Environment Protection Authority
EPR	Environmental Performance Requirements
FFMP	Flora and Fauna Management Plan
GHG	Greenhouse Gas
GMMP	Ground Movement Management Pan
GWMP	Groundwater Management Plan
HMP	Heritage Management Plan
HSMP	Hazardous Substances Management Plan
HPAMP	Historic Places and Archaeological Management Plan
IREA	Independent Reviewer and Environmental Auditor
ISCA	Infrastructure Sustainability Council Australia
LMP	Lighting Management Plan
JASANZ	Joint Accreditation System of Australia and New Zealand
NML	Noise Management Levels
NYMS	North Yarra Main Sewer
PPP	Public Private Partnership
PSA	Planning Scheme Amendment
PSR	Project Scope & Requirements (Project Agreement or Contract)
SAQPs	Sampling Analysis and Quality Plans
SEPP	State Environment Protection Policy
SSMP	Soil and Spoil Management Plan
TBM	Tunnel boring machine
WEMP	Worksite Environment Management Plan
WGTP MTIA	West Gate Tunnel Project Major Transport Infrastructure Authority (the State)
WMP	Water Management Plan

WstMP	Waste Management Plan
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# 1 INTRODUCTION

## 1.1 Purpose of this Report

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

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

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

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

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

## 1.2 Project Background

### 1.2.1 West Gate Tunnel Project

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

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

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

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

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

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

A publicly accessible Project Information Centre located on Whitehall Street in Yarraville (known as the Pivot site) is usually open to the public. However, during the reporting period the centre was closed to the public for several months in line with the Major Transport Infrastructure Authority coronavirus communications principles, which required the closing of all info hubs. 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 (EPA) for design and construction of the tunnel ventilation structures.
- Cultural Heritage Management Plan (CHMP) 14562 issued by Aboriginal Victoria for works potentially affecting known and potential areas of Aboriginal Cultural Heritage Significance. CHMP 14562 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.

On 1 July 2021, the new *Environment Protection Act 2017* came into force. The “Compliance Code for Victoria’s Big Build Projects” (EPA Publication 1998, June 2021) applies to the Project and provides practical guidance on how to comply with specific duties and obligations under the *Environment Protection Act 2017* and *Environment Protection Regulations 2021*.

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.

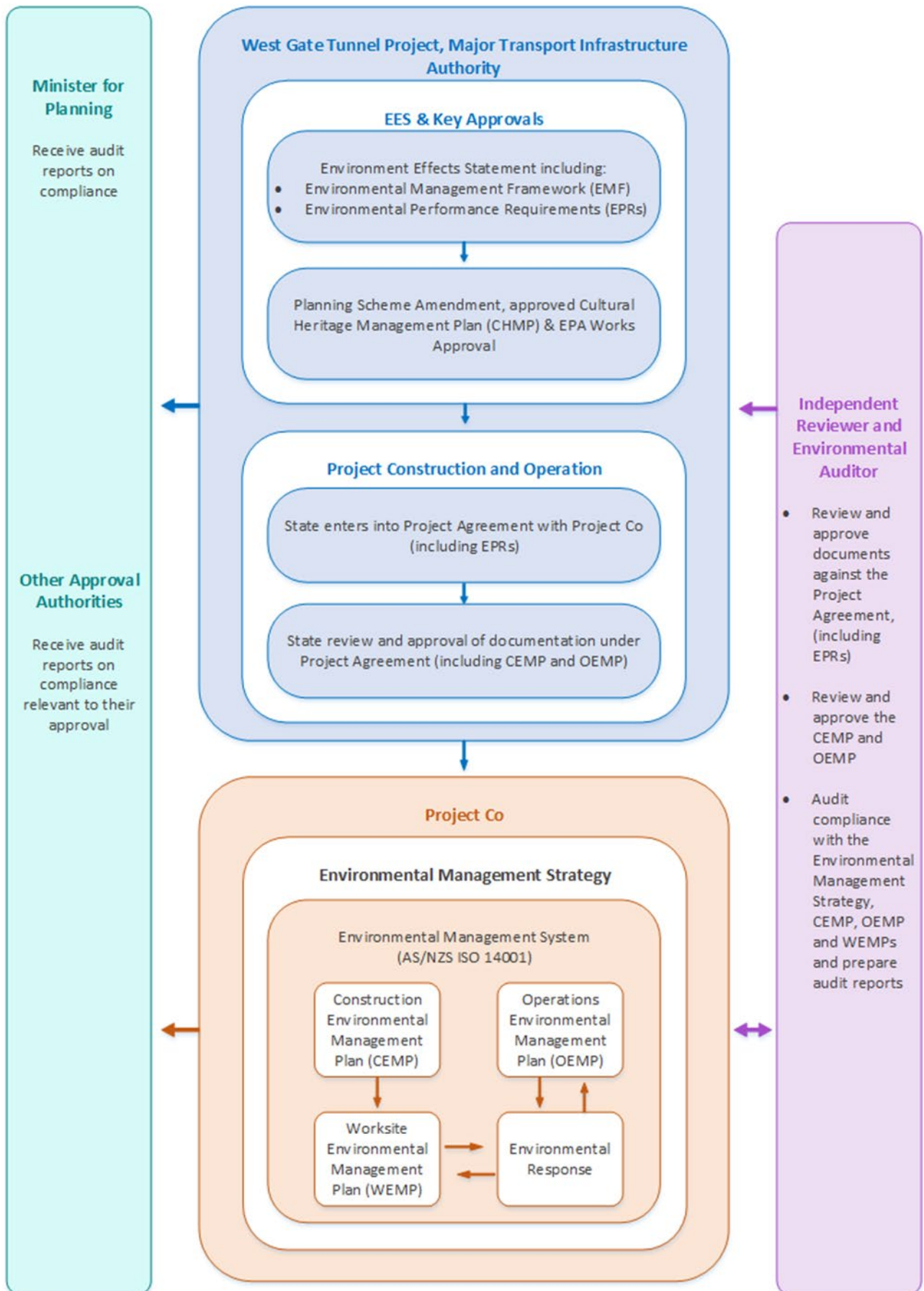


Figure 1 – Governance Framework for the Project Environmental Management Strategy (adapted from Strategy 2018)

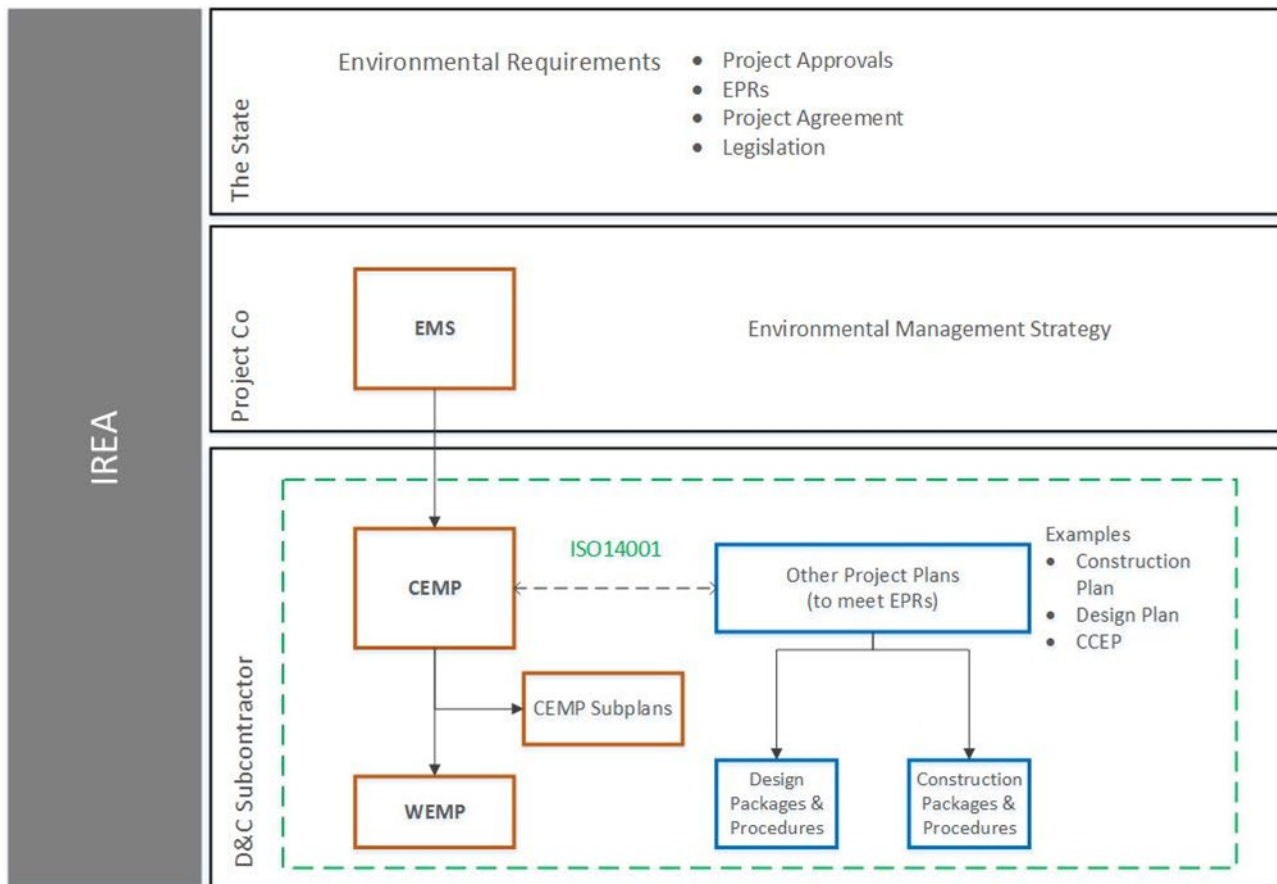


Figure 2 – Relationship between environmental management framework and Project design and construction documentation

### 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	Rev 12 - under review
Water Management Plan Rev 10 – 22 October 2019	current
Flora and Fauna Management Plan Rev 17 – 31 May 2021	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 9 – 12 February 2021	current
Waste Management Plan Rev 11 – 31 March 2020	current
Energy Management Plan Rev 12 – 15 February 2021	current
Hazardous Substances Management Plan Rev 10 – 2 April 2020	current
Lighting Management Plan Rev 12 – 15 February 2021	current
Soil and Spoil Management Plan Rev 12 – 4 August 2020	Rev 12 – under review
Air Quality Management Plan Rev 10 – 7 September 2020	Rev 11 – under review
Ground Movement Management Plan Rev 9 – 7 September 2020	Rev 9 – under review
Tree Management Plan *	Rev B – under review

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

These sub plans do not address the entire scope of all EPRs for the Project. The CEMP makes reference to a suite of other management plans which are required to demonstrate how these and other EPRs will be complied with e.g. Interface Management Plan, Business Involvement Plan, Design Management Plan, Construction Management Plan, Communications and Community Engagement Plan (CCEP), Construction 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 (seventh) six months of construction between March 2021 – August 2021. The formal audits described in this Minister’s Report have been undertaken by the IREA Lead Environment Auditor, Hilary Chapman and Assistant Environment Auditors, Camilla Freestone, Ryan MacManus, Farzeen Khundkar and Caroline Funnell. 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 2021 to August 2021 (inclusive).

### 2.2 IREA Auditing Process

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

Multiple COVID-19 pandemic state of emergencies occurred during the reporting period, May 2021 to June 2021, July 2021, and August 2021 onwards. Construction continued during the state of emergencies, with the IREA completing all required environmental audits and continued surveillances. The IREA undertook COVIDSafe work practices and protocols in line with prevailing Victorian Government health advice.

### 2.3 Audit Scope

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

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

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

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

In this six-month reporting period, 45 of the 117 EPRs were audited by the IREA. 45 EPRs were audited during the previous reporting period (September 2020 – February 2021), bringing the total EPRs audited for this 12-month period to 85<sup>2</sup> (refer Appendix A). The remaining EPRs not audited include:

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

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<sup>2</sup> The audit schedule for EPRs is subject to change based on potential risks. This resulted in five EPRs audited twice in the past 12 months.

- Nine EPRs were not audited due to low risk.

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

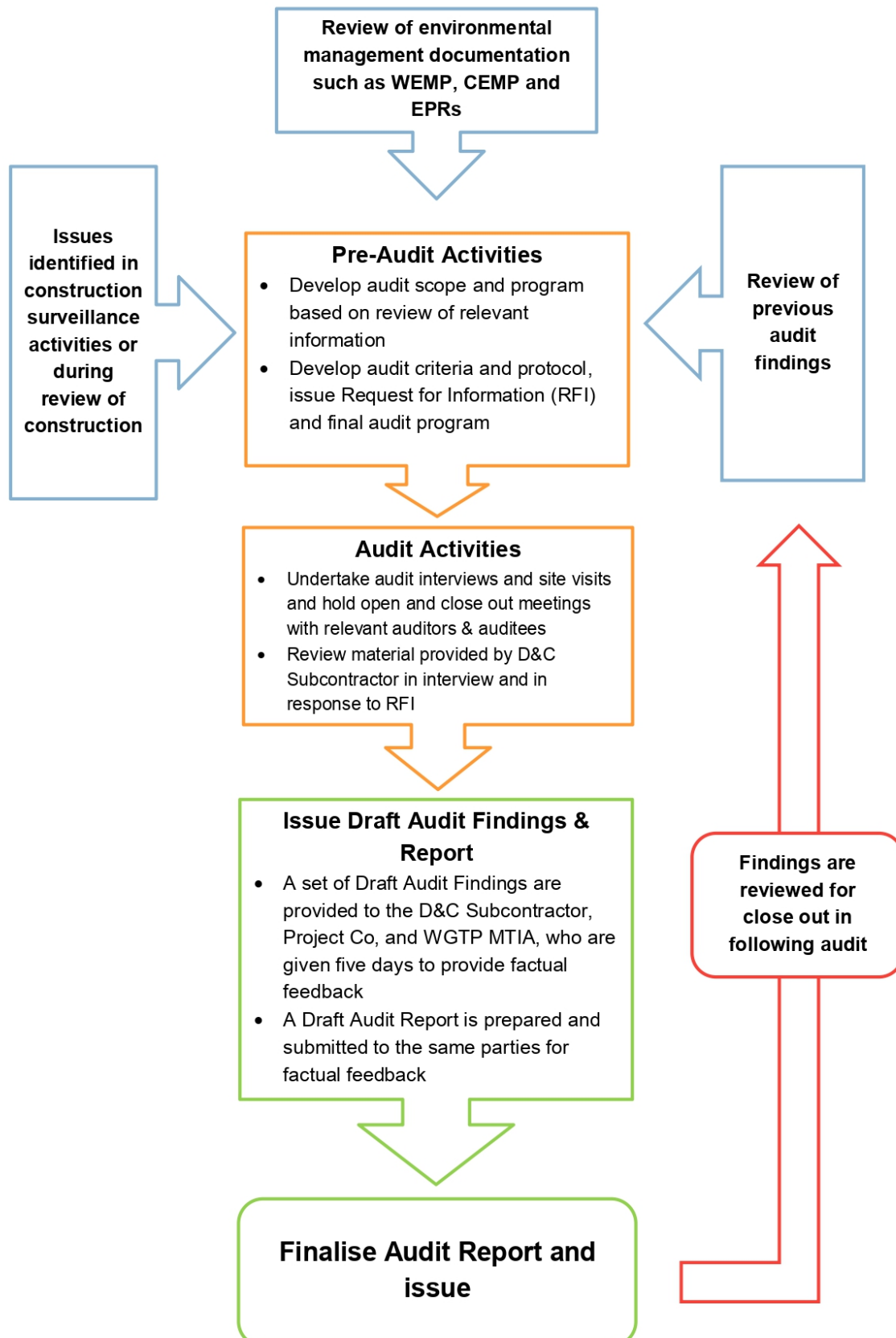


Figure 3 – Overview of environmental audit process

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 2021 to August 2021

Audit Type	Date	Scope
Strategy Audit	August 2021	<ul style="list-style-type: none"> <li>Strategy (revision 6) dated 31 January 2018 and the legislation, approvals, consents, guidelines and standards relevant to its implementation.</li> </ul>
CEMP Audit	May 2021 & August 2021	<ul style="list-style-type: none"> <li>Elements 1, 3, 8 and 12 of the CEMP. Revision 10 (dated 11 December 2019) of the CEMP were audited in the May 2021 and August 2021 audits.</li> <li>Relevant documentation including relevant D&amp;C Subcontractor management plans and subplans such as the Air Quality Management Plan, Construction Communications and Community Engagement Plan, Ground Movement Management Plan, Groundwater Management Plan, Hazardous Substances Management Plan, Heritage Management Plan, Historic Places and Archaeological Management Plan, Soil and Spoil 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 2021 Tunnels Zone	<ul style="list-style-type: none"> <li>Site audit at South Portal Excavation and South Portal Outbound.</li> </ul>
	April 2021 East Zone	<ul style="list-style-type: none"> <li>Site audit at Bridge 80.</li> </ul>
	May 2021 West Zone	<ul style="list-style-type: none"> <li>Site audit at Outbound Carriageway and Hyde Street Ramps</li> </ul>
	June 2021 Tunnels Zone	<ul style="list-style-type: none"> <li>Site audit at South Portal Inbound.</li> </ul>
	July 2021 East Zone	<ul style="list-style-type: none"> <li>Site audit at F-Gate Railyard</li> </ul>
	August 2021 West Zone	<ul style="list-style-type: none"> <li>Site audit at M80 Interchange and Kororoit Creek.</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 2021 and 31 August 2021, and on findings closed between 1 April 2021 and 30 September 2021. Findings closed between 1 and 31 March 2021 have been included in the previous reporting period (September 2020 – February 2021).

### 2.3.1 Design and Construction Activities – March 2021 to August 2021

The current evaluation by the D&C Subcontractor<sup>3</sup> is that progress of physical construction is 37.4% and the overall design for the Permanent Works is over 99% complete based on earned value.

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

- West
  - The Summer Blitz Campaign which included widening works at Grieve Parade and the M80 interchange ramps in Sub-Zone 201 and Sub-Zone 202A were completed. Freeway centre median works for Stage 2 were undertaken, with the majority of centre median works completed. Approximately 600 metres of permanent median barriers were installed east of Newport Bridge. Concrete pours on the superstructure were completed for Millers Road Bridge, in addition to precast noise wall panel installation at M1, M3 and M4 ramps in Sub-Zone 202A. Bulk earthworks within Parcel 485, pavement works on both sides of Newport Rail, and works at Bridges 22, 23, 25 in Sub-Zone 202B continued. Works for Bridges 30, 31 and 32 in Sub-Zone 203 were ongoing.
- Tunnels and Portals
  - Whilst the Tunnel Boring Machine launch has remained delayed, maintenance and Back End Work preparations have continued. In-situ structural works continued at the maintenance and smoke duct level for the North Portal cut and cover structure. At the interface with Zone 400 abutments, over height vehicle ramp and above ground works are ongoing. Excavation and temporary support were completed at the Southern Outbound Portal. Enabling works, including drainage and barriers, and form reinforcement pour were completed and continue westwards to Zone 200 in anticipation of paving and livening of Bridge 23 collector distributor and ramp completion. Permanent works commenced in the open trough section of Southern Inbound Portal, with excavation and temporary support under the roof deck, as well as transportation of spoil to the Pivot Site continuing. Temporary works for TBM reception and retrieval at both portals are underway.
- East
  - Gas main cut and cap works at Egan's property, 31 pile caps and one land column were completed in Sub-Zone 401. Substructure works for the three bridges over the Maribyrnong River, including crossheads for Bridge 50 on the eastern bank continued. Pile driving for Bridge 53 commenced after the Mackenzie Road diversion opened to the public. Construction continued of the three abutments west of the Maribyrnong River. Bridge 60 works in Sub-Zone 401, including pile driving, form reinforcement pour of pile caps and erection of precast pier elements along Footscray Road were undertaken. Gas relocation commissioning works were completed along Footscray Road (service road), in addition to piling recommencing. Completion of bored piling works under CityLink in the F-Gate area for Bridge 73 and Bridge 80 marine piling works on the east bank of Moonee Ponds Creek in Sub-Zone 404. E-Gate storage yard works for Metro Trains Melbourne/Yarra Trams were completed and handed back to the transport authorities. Redundant 66kV lines and towers in Dynon North were removed, and 61 pile caps were completed, in addition to the completion of form reinforcement pour pile caps at Bridge 80 and 81 and rail systems enabling works for Bridge 83.

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<sup>3</sup> WGT-100-000-REP-CJH-100-000-0002 Report Date 1 March 2021





*Photo 1 – Precast pier elements along Footscray Road – East Zone (Source: WGTP MTIA, 12 June 2021)*

## 2.4 Audit Findings Classification

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

### Conformance

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

### Non-conformance

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

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



## **Opportunity for Improvement**

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

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

## **Observation**

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

## **Not Applicable**

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

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

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

## **Significance of Findings**

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

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

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



Photo 2 – Bridge 30 – West Zone (Source: WGTP MTIA, 12 June 2021)

### 3 SIX-MONTHLY AUDIT FINDINGS

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

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

#### 3.1 Environmental Management Strategy

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

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

##### Previous reporting periods

No findings remain open from previous reporting periods.

#### 3.2 Environmental Performance Requirements

The majority of EPRs formally audited during this reporting period were considered compliant. One finding from a previous reporting period was raised from an opportunity for improvement to a non-conformance during this reporting period. No other non-conformances were raised during, while a number of opportunities for improvement were raised during this reporting period. The following section focuses on non-conformances and opportunities for improvement raised during this reporting period only.

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

##### 3.2.1 Environmental Management

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

##### Previous reporting periods

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

Refer also to related CEMP findings in Section 3.3.

##### 3.2.2 Air Quality

Three air quality EPRs were audited during this reporting period, namely AQP1, AQP4 and AQP6. All were deemed compliant.

The IREA also notes that a couple of AQP EPRs were not audited in the audit period as they relate to the operational phase, which does not currently relate to the scope of the Project. These inactive EPRs are AQP5 and AQP7.

##### 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**

One business EPR was audited during this reporting period, namely BP6. BP6 was deemed compliant.

#### **Previous reporting periods**

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 reporting period, namely CHP1, CHP2, CHP3, CHP7, CHP8 and CHP9. All were deemed compliant.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

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

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

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

No new findings were raised against CSP1 and CSP2 as a previous opportunity for improvement against CSP2 which is relevant to both EPRs remains open.

CSP3 and CSP4 were deemed compliant.

#### **Previous reporting periods**

One opportunity for improvement remains open against CSP2 from previous reporting period.

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





Photo 3 – South Portal Outbound - Tunnels Zone (Source: WGTP MTIA, 21 May 2021)

### 3.2.6 Ecology

One ecology EPR was audited during this reporting period, namely EP5. EP5 was deemed compliant.

#### Previous reporting periods

No findings remain open from previous reporting periods.

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

### 3.2.7 Greenhouse Gas Emissions

One greenhouse gas emissions EPR was audited during this reporting period, namely GGP1. GGP1 was deemed compliant.

#### Previous reporting periods

No findings remain open from previous reporting periods.

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

### 3.2.8 Ground Movement

One ground movement EPR was audited during this reporting period, namely GMP3. GMP3 was deemed compliant.

#### Previous reporting periods

No findings remain open from previous reporting periods.

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

### **3.2.9 Groundwater**

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

One non-conformance was raised from a previous opportunity for improvement against GWP1 due to the Groundwater Management Plan being overdue for the six-month review with groundwater management outside of the Tunnels Zone needing to be included in the plan.

GWP2, GWP4, GWP5 and GWP6 were deemed compliant.

#### **Previous reporting periods**

One opportunity for improvement raised against GWP1 was raised to a non-conformance during this reporting period, refer above. Consequently, there is no longer an opportunity for improvement against GWP1.

One opportunity for improvement remains open against GWP3 from previous reporting period.

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.

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

### **3.2.11 Landscape and Visual**

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

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

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

### **3.2.12 Noise and Vibration**

Three noise and vibration EPRs were audited during this reporting period, namely NVP1, NVP2 and NVP5. All were deemed compliant.

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

#### **Previous reporting periods**

One opportunity for improvement raised against NVP8 was closed during this reporting period.

One opportunity for improvement remains open against NVP8 and NVP18 from previous reporting periods.

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



*Photo 4 – West Gate Freeway centre median works at Grieve Parade Bridge – West Zone (Source: WGTP MTIA, 18 March 2021)*

### 3.2.13 Social

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

#### Previous reporting periods

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

### 3.2.14 Surface Water

Seven surface water EPRs were audited during this reporting period, namely SWP1, SWP6, SWP7, SWP9, SWP10, SWP11 and SWP12.

One opportunity for improvement was raised against SWP10 due to the lack of evidence for consultation with Council concerning upcoming works on Maribyrnong River and Moonee Ponds Creek.

SWP1, SWP6, SWP7, SWP9, SWP11 and SWP12 were deemed compliant.

#### Previous reporting period

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

Refer also to Water Management Plan findings in Section 3.3.12.



### 3.2.15 Transport

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

One opportunity for improvement was raised against TP3 as no evidence was provided for how traffic restrictions on New Street are communicated to the construction team or how the D&C Subcontractor monitors New Street to demonstrate compliance with the allowed vehicle movements.

TP2, TP6, TP7 and TP9 were deemed compliant.

#### Previous reporting periods

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

### 3.2.16 Waste Management

WMP1 was not audited during this 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 2021 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 9 Training & Awareness).
- Construction Communications and Community Engagement Management Plan (Section 5.1.5 Liaising with directly affected residents and property owners, Section 5.1.6 Working with locally affected business, organisations and commercial areas).
- Hazardous Substances Management Plan (Section 4 Management Measures, and Section 5 Monitoring and Reporting).
- Water Management Plan (Section 5 Management Measures, and Section 6 Monitoring).

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

- CEMP (Element 1 Leadership, Accountability and Culture, and Element 8 Subcontractor Relationships).
- Ground Movement Management Plan (Section 3 Management Measures, Section 4 Monitoring, Section 5 Communication and Consultation)
- Groundwater Management Plan (Section 4 Hydrogeological Model, Section 5 Monitoring, Section 6 Groundwater Impact Mitigation Measures, and Section 7 Trigger Values).
- Heritage Management Plan (Section 5 Heritage Management).
- Historic Places and Archaeological Management Plan (Section 5 Archaeological Management Plan).
- Soil and Spoil Management Plan (Section 4 Management, Section 5 Monitoring and Inspections, and Section 8 Training and Awareness).

### Current Reporting Period

One opportunity for improvement and one observation were raised against the following CEMP Elements:



- One opportunity for improvement against Element 8.3 as evidence of audit undertaken by the D&C Subcontractor to identify environmental compliance of a subcontractor was for one project zone and did not determine subcontractor compliance across the whole project or multiple zones. Additionally, evidence demonstrating subcontractor audit finding close out was not provided. The D&C Subcontractor stated they are working with the subcontractor to improve and ensure audit finding close out.
- One observation against Element 3.6 due to the emissions factors and calculations used by the D&C Subcontractor from the National Greenhouse Accounting Factors are not the latest revision.

### **Previous Reporting Periods**

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

Four opportunities for improvement remain open against the CEMP from previous reporting periods.

### **3.3.1 Air Quality Management Plan**

One non-conformance was raised against the Air Quality Management Plan (AQMP) during this reporting period. The non-conformance was raised as a correction factor for air quality monitoring units to identify air quality triggers was not periodically calibrated as per Australian Standards or utilised by the D&C Subcontractor to identify air quality triggers, resulting in fewer trigger alerts for management action.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

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

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

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

#### **Previous reporting periods**

Two opportunities for improvement remain open from previous reporting periods.

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

### **3.3.3 Energy Management Plan**

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

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

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

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

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

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

Refer to Section 3.2.6 for findings relating to ecology EPRs.

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

One opportunity for improvement was raised against the Ground Movement Management Plan (GMMP) during this reporting period. The opportunity for improvement was raised as the management plan states the data management system which contains ground movement data will be made accessible to Project Co and the IREA. Access to the data management system has not been provided, with data currently made available to Project Parties via a monthly report.

#### **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**

One observation was raised against the Groundwater Management Plan (GWMP) during this reporting period. The observation relates to addressed IREA comments for a Groundwater Monitoring Event not passed onto the IREA for comment close-out.

#### **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 observation was raised against the Hazardous Substances Management Plan (HSMP) during this reporting period. The observation relates to maintenance of Safety Data Sheets for chemical products held on one of the sites.

#### **Previous reporting periods**

No findings remain open from previous reporting periods.

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

### **3.3.8 Heritage Management Plan**

One observation was raised against the Heritage Management Plan (HMP) during this reporting period. The observation is related to ground disturbance procedures on site.

#### **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**

Two opportunities for improvement remain open from previous reporting periods.

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

No adverse findings were raised for the Soil and Spoil Management Plan during this reporting period.

### Previous reporting periods

Two opportunities for improvement remain open from previous reporting periods.

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



*Photo 5 – Substructure works for bridges over Maribyrnong River – East Zone (Source: WGTP MTIA, 8 September 2021)*

### 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

Two observations were raised against the Water Management Plan (WMP) during this reporting period:

- One observation relates to the WMP requiring increased frequency of monitoring during works in the waterway. Monitoring frequency for works at Moonee Ponds Creek was not increased despite in-stream works, however it is noted site controls implemented by the D&C Subcontractor appear to be effective.
- One observation as a review of the Pre and Post Rainfall Inspection Tracking register identified the post-rainfall tab was not up to date.

### **Previous reporting periods**

One opportunity for improvement remains open from previous reporting periods.

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

## **3.3.13 Landscape Management Plan**

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**

No findings remain open from previous reporting periods.

## **3.3.14 Business Involvement Plan**

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

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

### **Previous reporting periods**

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

Refer to Section 3.2.3 for findings relating to business EPRs.

## **3.3.15 Construction Communications and Community Engagement Plan**

No adverse findings were raised against the Construction Communications and Community Engagement Plan (CCCEP) during this reporting period.

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

### **Previous reporting periods**

No findings remain open from previous reporting periods.

## **3.4 Worksite Environmental Management Plan**

WEMP audits are conducted on a monthly basis, with six WEMP audits conducted during this reporting period. A total of 14 findings were raised in this reporting period compared to 34 in the previous reporting period. Findings raised during this reporting period comprised:

- No non-conformances.
- Four opportunities for improvement.
- Ten observations.

Of all WEMP findings:

- 29% related to environmental management and were administrative in nature.
- 7% related to soil and spoil management.
- 7% related to noise and vibration management.
- 7% related to air quality.
- 29% related to water management.

- 14% related to tree management.
- 7% related to hazardous substances management.

These figures are reflective of the types of works happening across the Project. The D&C Subcontractor has improved their on-site environmental management, resulting in the reduction of new audit findings from 34 findings in the previous reporting period to 14 during this reporting period.

One non-conformance and six opportunities for improvement were closed during this reporting period. One non-conformance and 13 opportunities for improvement remain open from previous reporting periods.

The reporting period saw a slight decrease in the number of findings open compared to the previous reporting period. In total there are 17 outstanding findings, comprising one non-conformance and 16 opportunities for improvement. Note, three opportunities for improvement raised in previous reporting periods that remain open are project-wide and are not covered in the zone specific sub-sections below.

### 3.4.1 West Zone

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

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

Two opportunities for improvement were raised, both relating to surface water management.

Six observations were also raised.

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

#### Previous reporting periods

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

Eight 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.

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

Two opportunities for improvement were raised:

- One relating to environmental management and was administrative in nature.
- One relating to soil and spoil documentation.

Three observations were raised.

Of the five findings raised during this period, one opportunity for improvement remains open.

#### Previous reporting periods

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

One non-conformance and one opportunity for improvement audit findings remain open from previous reporting periods.

### 3.4.3 East Zone

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

One observation was raised during WEMP audits of the East Zone in this reporting period, which was closed in the same period.



## Previous reporting periods

One opportunity for improvement remains open from previous reporting periods.



*Photo 6 – Northern Portal – Tunnel Zone (Source: WGTP MTIA, 21 May 2021)*

## 4 AUDIT CONCLUSIONS

### Environmental Management Strategy

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

No findings remain open from previous reporting periods.

### Environmental Performance Requirements

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

- One non-conformance relating to groundwater management. This was raised from a previous opportunity for improvement finding, refer to Section 3.2.9.
- Two opportunities for improvement. These related to surface water and traffic management.
- Five observations.

One opportunity for improvement from previous reporting periods was closed, while one opportunity for improvement was raised to a non-conformance as mentioned above. In total there are 17 findings remaining open at the end of this reporting period, comprising of one non-conformance and 16 opportunities for improvement.

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

### Construction Environmental Management Plan

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

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

- One non-conformance was raised during this audit, relating to air quality monitoring requirements outlined in the Air Quality Management Plan.
- No opportunities for improvement were raised.
- Four observations were also raised.

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

- No non-conformances were raised during this audit.
- Two opportunities for improvement were raised. This included one against the CEMP relating to subcontractor audit finding close out, and one against the Ground Movement Management Plan regarding data accessibility to Project Parties.
- Two observations were also raised.

One non-conformance and one opportunity for improvement from previous reporting periods were closed. In total there are 15 findings remaining open at the end of this reporting period, comprising one non-conformance and 14 opportunities for improvement. The IREA will continue to work with Project Co / D&C Subcontractor to close out any outstanding findings.

### Worksite Environment Management Plans

During the reporting period six WEMP audits were conducted. A total of 14 findings were raised in this reporting period. These consisted of:

- No non-conformances
- Four opportunities for improvement
- Ten observations.



The D&C Subcontractor has improved their system processes and environmental management on site, resulting in the reduction of new audit findings from 34 findings in the previous reporting period to 14 during this reporting period. One non-conformance and six opportunities for improvement were closed during this reporting period. In total there are 17 WEMP audit findings remaining open, comprising one non-conformance and 16 opportunities for improvement. All findings raised between March 2018 and October 2019 were closed.

## **Conclusions**

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

Implementation of the EPRs was found to be generally compliant, with one non-conformance and two 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:

- Groundwater management and associated documentation.
- Air quality monitoring calibration and air quality trigger alerts.
- Surface water management to minimise potential impacts.
- Soil and spoil tracking documentation for the Tunnel Zone.
- Evidence of close-out actions of subcontractor audit findings.
- Monitoring of traffic restrictions and vehicle movements.
- Accessibility of ground movement monitoring data to Project Parties.

Progress in closing out audit findings has remained steady. The IREA encourages continued efforts by Project Co and the D&C Subcontractor to close out remaining open audit findings. It is noted that a number of the audit findings from previous reporting periods remain open.



*Photo 7 – Bridge 80 works Moonee Ponds Creek – East Zone (Source: WGTP MTIA, 16 April 2021)*

**APPENDIX A- EPR AUDITING STATUS**

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

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

Environmental Performance Requirements	Review & Surveillance				Audit				Phase	Project and Audit Status (May 2021 to February 2022)*	Responsible Party
	MP	DR	CR	CS	May-21	Aug-21	Nov-21	Feb-22			
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 observation was raised in May 2021 (May-21_EMP_01). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C / OpCo
EMP3 Environmental Compliance								X	PC, C, O	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C / OpCo (WGTP MTIA will forward audit reports to Minister for Planning and will publish audit reports only)
EMP4 Complaints Management System	X				X				PC, C	The IREA audited this EPR in May 2021 and it was deemed compliant, while noting the previous findings remain open. 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.	D&C
Air Quality											
AQP1 Tunnel Ventilation System Design		X			X				D, C	The IREA audited this EPR in May 2021 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. As the design component is complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C / OpCo
AQP3 In Tunnel Air Quality		X		X					D, O	The IREA audited this EPR in May 2020, and it was deemed compliant. As the design component is complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C / OpCo
AQP4 Ambient Air Quality Monitoring	X			X	X				C, O	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C / OpCo
AQP5 In Tunnel Air Quality and Ventilation Structure Emissions Compliance									O	Not yet audited. Not applicable to construction phase.	OpCo
AQP6 Air Quality During Construction	X		X	X	X				C	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
AQP7 Roadside Air Quality Mitigation Strategy									O	Not yet audited. Not applicable to construction phase.	WGTP MTIA (OpCo)
Business											
BP1 Damage or Impacts on Third Party Property and Infrastructure	X	X	X	X			X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
BP2 Access and Amenity for Business and Commercial Facilities		X	X	X			X		D, C	An observation was raised in November 2020 (Nov-20_EPR_02). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
BP3 Screening		X	X	X			X		C	An opportunity for improvement was raised in November 2020 (Nov-20_EPR_03) and remains open.	D&C
BP4 Impacts on Operation of Community, Private Recreation and Council Facilities and Services		X	X	X			X		All	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C / OpCo
BP5 Business Involvement Plan	X		X	X			X		PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant, while noting the previous findings remain open. 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.	D&C
BP6 Utility Assets		X	X	X		X			D, C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C
BP7 Gas Utilities		X	X	X			X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
BP8 Business Disruption		X	X	X				X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
BP9 Business Acquisition Process		X	X	X			X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	WGTP MTIA
Cultural Heritage											
CHP1 Cultural Heritage Management Plan	X	X	X	X	X				D, C	An observation was raised in May 2021 (May-21_EPR_06). As agreed on 1 February 2019 observations are to be closed once reported on initially.	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 2021 and it was deemed compliant.	D&C

Environmental Performance Requirements	Review & Surveillance				Audit				Phase	Project and Audit Status (May 2021 to February 2022)*	Responsible Party
	MP	DR	CR	CS	May-21	Aug-21	Nov-21	Feb-22			
CHP3 Archaeological Management Plan	X		X	X		X			PC, C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C
CHP4 Monitoring of Heritage Sites and Places		X	X	X				X	C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
CHP5 Archival Photographic Records		X						X	PC	The IREA audited this EPR in February 2021 and it was deemed complaint.	D&C
CHP6 Port Phillip Monument		X						X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
CHP7 Heritage Interpretation Strategy	X	X				X			PC, C	An observation was raised in August 2021 (Aug_21_EPR_04). 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 2021 and it was deemed complaint.	D&C
CHP9 Maribyrnong River Front (Footscray)		X	X	X		X			D	An observation was raised in August 2021 (Aug_21_EPR_06). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
CHP10 Bluestone Bridge		X					X		C	The IREA audited this EPR in November 2020 and it was deemed complaint.	D&C
CHP11 Rail Turntables		X	X	X					D	The IREA audited this EPR in November 2019 and it was deemed complaint. As the design component is complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing.	D&C
CHP12 Flinders Street								X	C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
Contaminated Soil and Spoil Management											
CSP1 Contaminated Soil Requirements	X	X	X	X		X			C	The IREA audited this EPR in August 2021. No finding was raised, an existing related finding was instead referred to against EPR CSP1 (refer Nov-20_EPR_09) which remains open.	D&C
CSP2 Contaminated Soil and Spoil Management	X	X	X	X		X			PC, C	The IREA audited this EPR in August 2021. No finding was raised, an existing related finding was instead referred to against EPR CSP2 (refer Nov-20_EPR_09) which remains open.	D&C
CSP3 Acid Sulphate Soil	X		X	X		X			PC, C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C
CSP4 Odour Management	X		X	X		X			C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C
Ecology											
EP1 Minimise Vegetation Removal and Disturbance		X	X	X			X		D, PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
EP2 Vegetation Protection Measures	X	X	X	X			X		PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
EP3 Reinstatement		X	X	X				X	C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
EP4 Fauna Management Measures	X	X	X	X			X		PC, C	The IREA audited this EPR in August 2020 and it was deemed compliant.	D&C
EP5 Works on Waterways		X	X	X	X				D, C	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
EP6 Landscaping Plan		X					X		D, PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
EP7 Vegetation Offsets	X		X	X			X		C	The IREA audited this EPR in August 2020 and it was deemed compliant.	WGTP MTIA
Greenhouse Gas Emissions											
GGP1 Greenhouse Gas Emissions		X	X	X	X				D	An observation was raised in May 2021 (May-21_EPR_08). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
GGP2 Emissions Reduction		X	X	X			X		D, C	An observation was raised in November 2020 (Nov-20_EPR_13). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
Ground Movement											
GMP1 Geotechnical Model and Assessment		X	X	X			X		PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
GMP2 Tunnel and Portal Drainage		X	X	X				X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
GMP3 Condition Surveys and Determination of Settlement Criteria for Property and Infrastructure		X	X	X		X			PC, C, O	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C / OpCo
GMP4 Settlement Criteria for Utilities		X	X	X				X	PC	The IREA audited this EPR in February 2021 and it was deemed complaint.	D&C
GMP5 Ground Movement Monitoring	X	X	X	X			X		PC, C, O	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C / OpCo
GMP6 Mitigation of Ground Movement Impact	X	X	X	X				X	C, O	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C / OpCo
Groundwater											
GWP1 Groundwater Management Measures	X	X	X	X		X			PC, C, O	A non-conformance was raised in August 2021 (Aug-21_EPR_12) and remains open. The non-conformance was raised from a previous finding, an opportunity for improvement raised in August 2020 (Aug-20_EPR_13).	D&C / OpCo
GWP2 Protection of Groundwater Quality	X		X	X		X			C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C



Environmental Performance Requirements	Review & Surveillance				Audit				Phase	Project and Audit Status (May 2021 to February 2022)*	Responsible Party
	MP	DR	CR	CS	May-21	Aug-21	Nov-21	Feb-22			
GWP3 Tunnel Drainage Design and Construction Methods		X	X	X				X	D, PC, C	An opportunity for improvement was raised in February 2021(Feb-21_EPR_12) and remains open.	D&C
GWP4 Predictive Groundwater Model		X	X	X		X			PC, C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C
GWP5 Groundwater Monitoring			X	X		X			PC, C, O	The IREA audited this EPR in August 2021 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 2021 and it was deemed compliant.	D&C
GWP7 Impacts on Groundwater Users		X	X	X				X	PC, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
Land Use											
LPP1 Minimise Design Footprint		X			X				D	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
LPP2 Recreation Facilities		X	X	X				X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
LPP3 Future Development Opportunities		X			X				D	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
LPP4 Pedestrian and Bicycle Connections		X			X				D	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
LPP5 Public Land		X	X	X				X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
Landscape and Visual											
LVP1 Urban Design Approach		X	X	X		X			D, C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C
LVP2 Reinstatement Following Temporary Works		X						X	D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
LVP3 Light Spillage	X	X	X	X			X		D, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
LVP4 Vegetation Screening		X					X		C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
LVP5 Design Review							X		D	The IREA audited this EPR in November 2020 and it was deemed compliant.	WGTP MTIA (on receipt of relevant design documentation in accordance with the design review process)
Noise and Vibration											
NVP1 Traffic Noise Limits		X	X	X		X			D, C	The IREA audited this EPR in August 2021 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 2021 and it was deemed compliant.	D&C
NVP3 Maintenance of Noise Mitigation Measures									O	Not yet audited. Not applicable to construction phase.	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 2021 and it was deemed compliant.	D&C
NVP6 Traffic Noise Monitoring		X							PO, O	Not yet audited. Not applicable to construction phase.	OpCo (for the O&M phase in accordance with sections 18.4 and 18.5 of Part B, otherwise WGTP MTIA)
NVP7 Construction Noise, Vibration Management, and Monitoring	X		X	X			X		PC, C	An observation was raised in August 2020 (Aug-20_EPR_20). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
NVP8 Construction Noise Targets			X	X			X		C	An opportunity for improvement was raised in May 2019 (May-19_EPR_24) and remains open.	D&C
NVP9 Blasting Trials and Assessment									C	The IREA audited this EPR in February 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 audit period as it is not relevant to the current scope.	D&C
NVP10 Construction Vibration Targets (Amenity)			X	X			X		C	An observation was raised in August 2020 (Aug-20_EPR_23). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C
NVP11 Construction Vibration Targets (Structures)			X	X			X		C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
NVP12 Ground-borne (Internal) Noise Targets									C	The IREA audited this EPR in February 2019 and it was deemed compliant. It was not audited in the subsequent audit periods as it was not relevant to the current scope.	D&C
NVP13 Utility Asset Protection		X	X	X			X		PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	D&C
NVP14 Tunnel Ventilation System Noise Design				X					D, O	The IREA audited this EPR in May 2020 and it was deemed compliant. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C / OpCo

Environmental Performance Requirements	Review & Surveillance				Audit				Phase	Project and Audit Status (May 2021 to February 2022)*	Responsible Party
	MP	DR	CR	CS	May-21	Aug-21	Nov-21	Feb-22			
NVP15 Tunnel Ventilation System Noise Monitoring									O	Not yet audited. Not applicable to construction phase.	OpCo
NVP16 Amenity Blast Vibration									C	The IREA audited this EPR in February 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 audit period as it is not relevant the current scope.	D&C
NVP17 Amenity Blast Overpressure Implement									C	The IREA audited this EPR in February 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 audit period as it is not relevant to the current scope.	D&C
NVP18 Construction Noise Management	X		X	X			X		C	An opportunity for improvement was raised in August 2020 (Aug-20_EPR_24) and remains open.	D&C
NVP19 Traffic Noise of Hyde Street, South of Francis Street									C	The IREA audited this EPR in February 2020 and it was deemed compliant. It will not be audited in the 2020 – 2021 period as it is considered closed.	WGTP MTIA
<b>Social</b>											
SP1 Urban Design Principles and Vision		X				X			D	The IREA audited this in August 2021 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 2021 and it was deemed compliant, while noting the previous findings remain open. Two opportunities for improvement were raised in May 2019 (May-19_EPR_26, May-19_EPR_27) and remain open.	D&C / OpCo
SP3 Community Liaison Group Participation							X		C	An observation was raised in November 2020 (Nov-20_EPR_21). As agreed on 1 February 2019 observations are to be closed once reported on initially.	D&C / WGTP MTIA
SP4 Social and Local Procurement	X							X	PC, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
SP5 Community Involvement and Participation Plan (CIPP)	X						X		PC, C	The IREA audited this EPR in November 2020 and it was deemed compliant.	WGTP MTIA
<b>Surface Water</b>											
SWP1 Design of Discharges and Runoff		X			X				D	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
SWP2 Water Sensitive Road Design		X							D	The IREA audited this EPR in November 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 period as it is considered closed.	D&C
SWP3 Tunnel Waste Water		X	X	X					PC	The IREA audited this EPR in February 2020 and it was deemed compliant. This EPR relates to operations-phase waste water. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C
SWP4 Water Quality Monitoring	X		X	X					PC	The IREA audited this EPR in August 2018 and it was deemed compliant. It will not be audited in the 2020 – 2021 period as it is considered closed.	D&C
SWP5 Spill Containment Design		X		X					D	The IREA audited this EPR in November 2019 and it was deemed compliant. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing, until the operations phase is relevant.	D&C
SWP6 Management of Chemicals, Fuels, and Hazardous Materials	X		X	X	X				C	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
SWP7 Surface Water Management During Construction	X		X	X	X				C	The IREA audited this EPR in May 2021 and it was deemed compliant, while noting the previous finding remains open. An opportunity for improvement was raised in May 2020 (May-20_EPR_23) and remains open.	D&C
SWP8 Use of non-potable water		X	X	X				X	C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
SWP9 Bank Stability		X	X	X	X				C	The IREA audited this EPR in May 2021 and it was deemed compliant, while noting the previous finding remains open. An opportunity for improvement was raised in May 2020 (May-20_EPR_25) and remains open.	D&C
SWP10 Waterway Modifications		X			X				D, C	An opportunity for improvement was raised in May 2021 (May-21_EPR_18) and remains open.	D&C
SWP11 Flood Levels, Flows and Velocities		X	X	X	X				D, PC, C	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
SWP12 Floodplain Storage Capacity		X	X	X	X				D	The IREA audited this EPR in May 2021 and it was deemed compliant.	D&C
SWP13 Tunnel Portal Flood Risk		X		X					D, O	The IREA audited this EPR in November 2019 and it was deemed compliant. As relevant design components are 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 / OpCo

Environmental Performance Requirements	Review & Surveillance				Audit				Phase	Project and Audit Status (May 2021 to February 2022)*	Responsible Party
	MP	DR	CR	CS	May-21	Aug-21	Nov-21	Feb-22			
SWP14 Maintenance of Melbourne water and Other Drainage Assets		X	X	X					D	The IREA audited this EPR in May 2020 and it was deemed compliant. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing.	D&C
SWP15 North Yarra Main Sewer		X							D	The IREA audited this EPR in February 2019 and it was deemed compliant. It will not be audited in the 2020 – 2021 period as it is considered closed.	D&C
<b>Transport</b>											
TP1 Optimise Design Performance		X						X	D	An opportunity for improvement was raised in February 2020 (Feb-20_EPR_01) and remains open.	D&C
TP2 Traffic Monitoring			X	X		X			PC, C, O	The IREA audited this in August 2021 and it was deemed compliant.	D&C / OpCo
TP3 Traffic Management Plan	X		X	X		X			PC, C	An opportunity for improvement was raised in August 2021 (Aug_21_EPR_21) and remains open.	D&C
TP4 Public Transport		X	X	X			X		PC, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
TP5 Rail operations		X					X		D, C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
TP6 Design Standards		X		X		X			D, C	The IREA audited this in August 2021 and it was deemed compliant. As relevant design components are complete, ongoing surveillance of the implementation of this EPR will be through other established IREA monitoring processes, rather than explicit auditing.	D&C
TP7 Traffic Management Liaison Group			X	X		X			PC, C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C
TP8 River Navigation		X	X	X			X		C	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C
TP9 Melbourne Metro Rail Authority Interface						X			C	The IREA audited this EPR in August 2021 and it was deemed compliant.	D&C
<b>Waste Management</b>											
WMP1 Waste Management	X	X	X	X				X	D, C, O	The IREA audited this EPR in February 2021 and it was deemed compliant.	D&C / OpCo



**APPENDIX B - IREA SPECIALIST TEAM**

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

- IREA Technical Leads for Groundwater, Emily Hepburn
- IREA Technical Lead for Air Quality, Dr Iain Cowan
- IREA Technical Lead for Soil and Spoil, Matt Collyer
- IREA Technical Lead for Noise and Vibration, Mike Dowsett
- IREA Technical Lead for Ground Movement, Stuart Oakey
- IREA Technical Lead for Sustainability, Bernadette Fitzgerald.

This report has been reviewed by the IREA Representative, Mike Cragg.

**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).