

West Gate Tunnel Project Inquiry and Advisory Committee

EPA Presentation
Day 1 – 14 August 2017



Environment
Protection
Authority Victoria

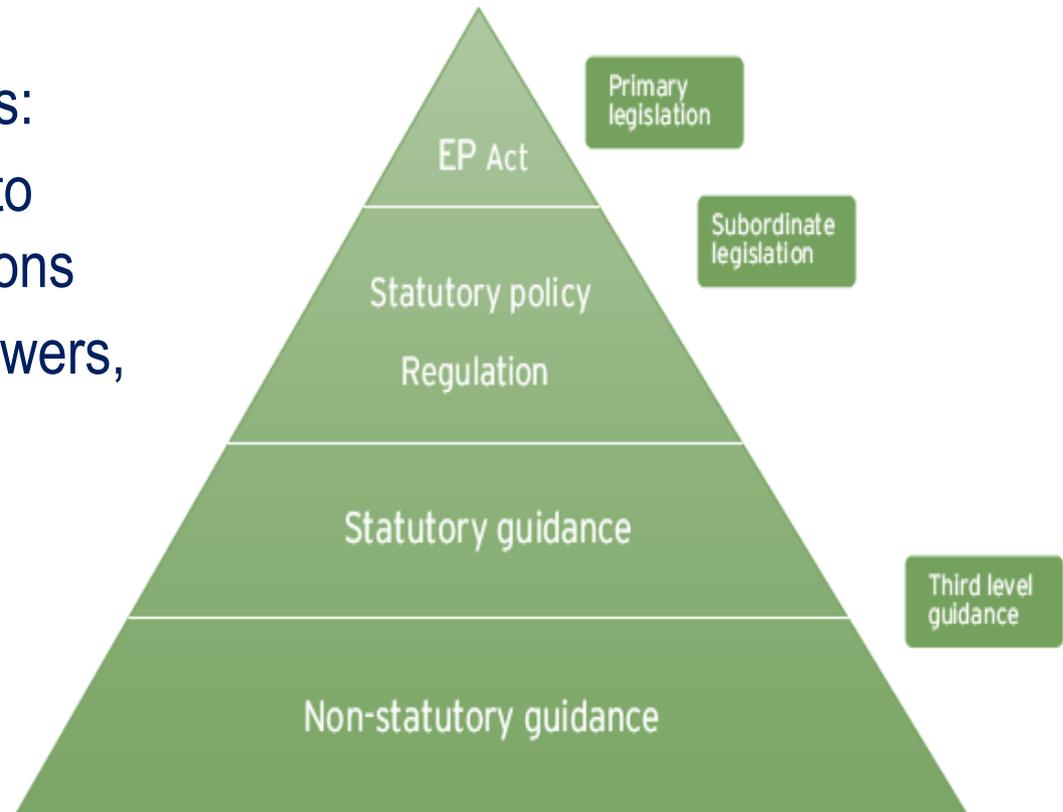


Overview

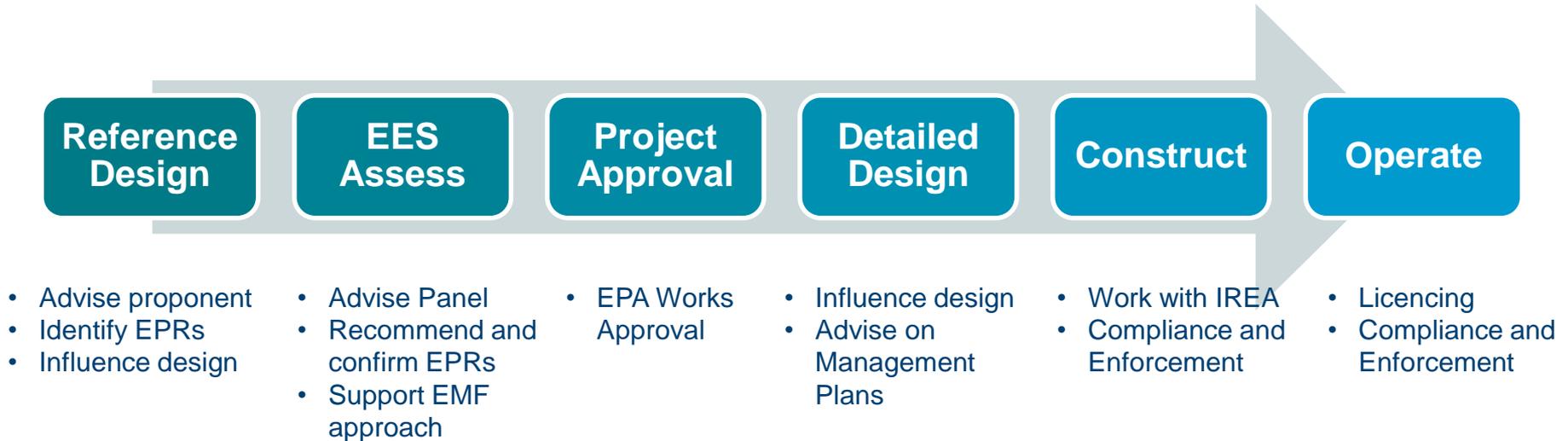
- Who we are
- What we do
- Statutory framework
- Approach to infrastructure projects
- EPA's role in the West Gate Tunnel Project
- Joint advertisement (EES & Works Approval application)
- EPA's focus areas (previously raised & new matters)
- Next steps

Environment Protection Framework

- Under the *Environment Protection Act 1970*, EPA is:
 - Independent authority to make regulatory decisions
 - With broad range of powers, duties and functions.
- Statutory Environment Protection and Waste Management Policies.
- EPA's focus is to regulate pollution.



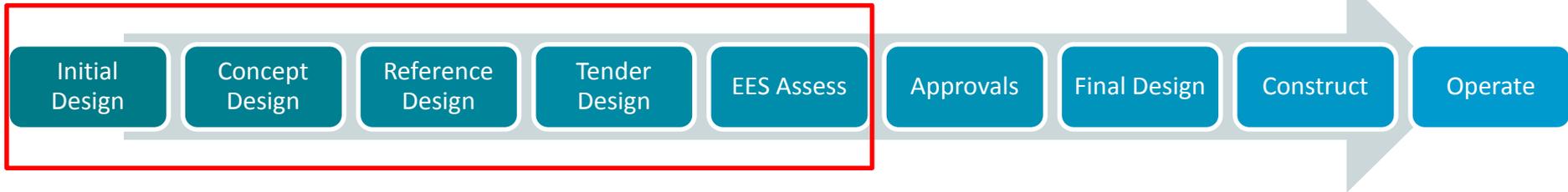
EPA's approach to infrastructure projects



Project detail increases through the project lifecycle

- As project details increase, EPA's assessment and advice becomes more precise.
- EPA's role changes throughout the project lifecycle.

EPA's role in the WGTP (to date)



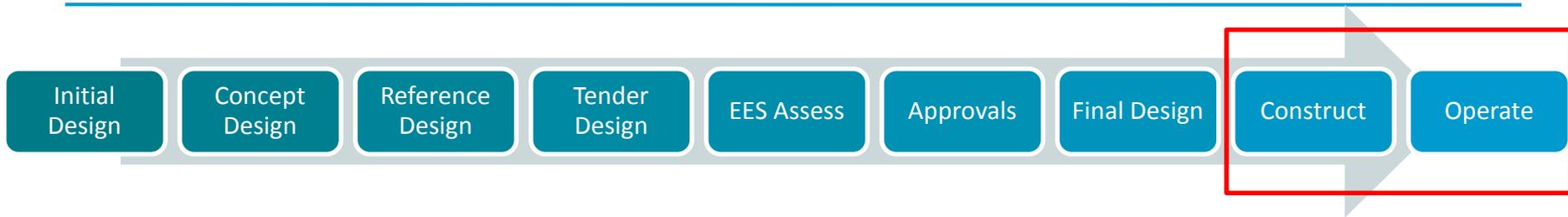
- Early involvement from initial design (~mid-2015).
- Advised on air quality monitoring program.
- Technical Reference Group member.
- Provided on-going technical and regulatory advise on:
 - Air quality, noise, greenhouse gas, groundwater, contaminated land, surface water and ecology, and health.
- Accepted a Works Approval application for the ventilation systems. Currently being assessed.
- Technical review of the EES and made submission to the IAC, dated 10 July 2017.
- Evaluating submissions (>500).
- Technical experts participated in air quality, noise and health conclaves.

Joint advertisement

Under the *Environmental Protection (Scheduled Premises and Exemptions) Regulations 2007*, the road tunnel ventilation systems proposed for the West Gate Tunnel Project, are scheduled premises (L03). Accordingly, a works approval must be obtained pursuant to section 19B of the EP Act prior to construction of that part of the Project.

This application has been made by the Western Distributor Authority and is under consideration by the EPA. In this case, the works approval is jointly advertised with a notice relating to the same proposal under the Environment Effects Act 1978, so engages section 20AA of the Environment Protection Act.

EPA's Focus Areas



Construction

Environment

- Spoil Management
- Groundwater Management
- Surface water & Ecology

Health and Amenity

- Noise
- Air quality dust

Operation

Health and Amenity

- Air quality (road side and ventilation system emissions)
- Noise from fixed plant

EPA's Focus Areas (cont'd)

EPA's advice on these focus areas are presented by:

1. Reinforcing key matters raised in EPA's written submission (such as the EPRs), and
2. Raising new matters identified for EPA through an independent assessment of air quality, noise and greenhouse gas

* Conclave outcomes are not considered in this presentation due to timing.

Air Quality – raised matters

Information requests –

1. Additional Air Quality Monitoring data from the five operational stations

Monitor, publicly report, and mitigate impacts –

2. Additional Air Quality Monitoring Program continue to operate throughout planning, construction and five years after commencement of Project operation.
3. Monitor PM_{2.5} and PM₁₀ along the affected roads of West Gate Freeway, Blackshaws Road, Millers Road and Geelong Road.
4. Implement roadside monitoring program for PM_{2.5} that is designed in consultation with community (also known as community co-design).
5. Public reporting of monitoring results, manage and mitigate impacts.

Environmental Performance Requirements –

6. EPA recommends that 'AQP1 – Tunnel ventilation system design' include design factors for retrofitting emission control equipment, for PM_{2.5}, PM₁₀, CO, and NO₂.
7. EPA recommends updating 'AQP3 – In tunnel air quality' to include a requirement to minimise any health impacts from in-tunnel air exposure.
8. EPA recommends that 'AQP5 – In-tunnel air quality and ventilation structure emissions compliance' includes remedial action to retrofit emission control equipment if Environmental Requirements are not met.

Noise – raised matters

Information requests –

1. Rationale to be developed to ensure all activity considered to be ‘unavoidable works’ meet the definition outlined in EPA Publication 1254.

Monitor, publicly report, and mitigate impacts –

2. Implement operational noise management plan for monitoring, (public) reporting and management to mitigate the potential impacts of predicted roadside noise along the identified affected roads.

Environmental Performance Requirements –

3. EPA recommends that the ‘unavoidable works’ rationale be included in ‘NVP3 – Construction noise, vibration, and monitoring’.
4. EPA recommends that any information associated with the determination of ‘unavoidable works’ is subject to community consultation and made publicly available.

Surface Water – raised matters

Information requests –

1. Development and implementation of a baseline surface water monitoring program which covers water and sediment characterisation at upstream, local and downstream areas to the Project area to accurately assess existing conditions, risks and potential impacts.
2. As part of the Construction Environmental Management Plan, a surface water management plan be prepared and implemented to manage potential surface water run-off impacts and any disturbance of contaminated bed soil associated with construction.

Monitor, publicly report, and mitigate impacts –

3. Baseline surface water monitoring program is used to develop realistic and effective management plans prior to commencement of construction.

Environmental Performance Requirements –

4. EPA requires 'SW1 – Design of discharges and runoff' include characterisation, treatment and discharge to the satisfaction of the EPA, and prioritising actions designed to maintain environmental quality (i.e. background conditions) and enhance beneficial uses.
5. EPA recommends consideration of potential disturbance to riverbed sediments and changes in waterway geomorphology and water quality in 'EP5 – Works on waterways' and implementation of control measures into the Project.

Ecology – raised matters

Environmental Performance Requirements –

1. EPA recommends expanding the temporal and spatial scales for ‘EP5 – Works on waterways’ to ensure that localised and downstream impacts on waterways are minimised in both the short and long term.
2. EPA recommends consideration of potential disturbance to riverbed sediments and changes in waterway geomorphology and water quality in ‘EP5 – Works on waterways’ and implementation of control measures into the Project.

Contaminated Land and Spoil Management– raised matters

Information requests –

1. EPA will require more information than what is currently available in the EES documentation to consider the applicability of any regulatory requirements administered by EPA; and to consider whether options for reuse and/or treatment of contaminated soil will achieve acceptable environmental outcomes. A detailed description of the information required by EPA is included in Appendix C of EPA’s written submission from 10 July 2017.

Submission on Environmental Performance Requirements –

2. EPA recommends ‘CSP2 – Contaminated soil and spoil management’ change to ‘The CEMP must include requirements and methods for contaminated soil and spoil management developed to the satisfaction of EPA Victoria.’

Groundwater – raised matters

Information requests –

1. EPA notes that the tender design tunnel length has been extended outside the reference design, and that there is less data available for this new section compared to the rest of the tunnel alignment.
2. EPA recommends that further site-specific data be collected on groundwater quality, levels, and flow to better inform the risk assessment and development of mitigation measures.

Monitor, publicly report, and mitigate impacts –

1. EPA supports ‘GWP5 – Groundwater monitoring’, but written submission includes requirements for scope of monitoring program.
2. If contaminated groundwater is encountered during the monitoring or construction works, EPA must be notified and contingency measures to manage any potential risks must be implemented.

Environmental Performance Requirements –

1. EPA requires that ‘GWP7 – Impacts on groundwater users’ be amended to include ‘Impacts on beneficial uses’.
2. EPA recommends that ‘GWP7 – Impacts on groundwater users’ include assessment to ensure that contaminated groundwater is not mobilised and does not impact on sensitive receptors and beneficial uses of groundwater.
3. EPA recommends that a new EPR be developed to address the management, treatment and disposal of PFAS-contaminated groundwater and land, in consultation with EPA.

Air Quality – new matters

1. Quantitatively assess emissions and potential impacts of air pollutants from the project during construction.
2. Identify receptors that are above ground-level including both existing or possible future multi-storey developments.
3. Assess potential impacts of the ventilation structures at elevated receptors.
4. The AQIA would be improved if the number of additional exceedances due to the Project were quantified.
5. The analysis for the cumulative assessment, to determine the number of additional exceedances, should be extended to all receptors.
6. In-tunnel concentrations of CO, NO₂ and visibility should be based on in-tunnel standards specified in PIARC, 2012 as a minimum.

Noise – new matters

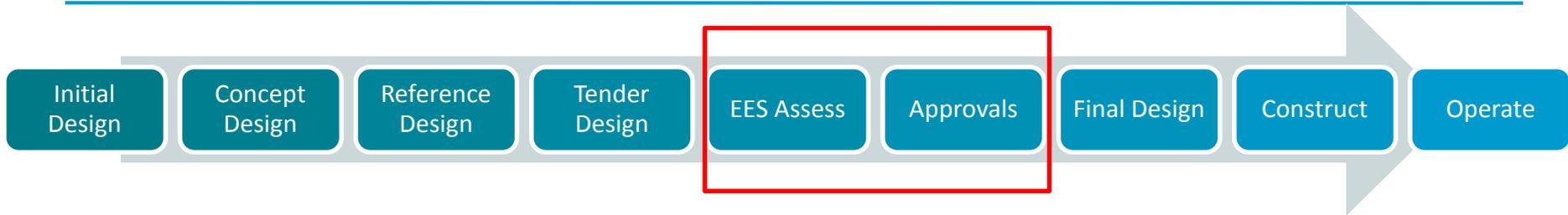
1. Uncertainty in background noise level and source noise level needs to be assessed and the impact on the number of potentially impacted receivers and the degree of impact at various locations needs to be determined.
2. The use of a correction for OGA needs to be explained in the light of the loss of noise reduction with age of the road.
3. There are many locations where potential exceedances of noise and vibration criteria will occur based on the predictions. Practical and realistic mitigation options need to be included in the report rather than deferring this to a later time.

Greenhouse Gas – new matters

It is unclear how the fulfilment of, Environmental Performance Requirement GGP1, a GHG related objective of the EMF, could be established.

1. EPA recommends EPR GGP1 should be reworded to clarify its purpose and how its progress can be tracked as part of the EMF.
2. Establish a 'base case' against the Project case to improve the transparency of the assessment and clearly indicate where GhG and energy reductions are being targeted.
3. Consideration of the alignment of the Project with National, State and local policies relating to GhG emissions.

Next Steps for EPA



- EPA request response time towards the end of the hearings schedule.
- EPA will await Minister for Planning assessment.
- EPA to make a final assessment decision on the Works Approval application.

West Gate Tunnel Project Inquiry and Advisory Committee

EPA Presentation
Day 1 – 14 August 2017



Environment
Protection
Authority Victoria

