

# West Gate Tunnel Project EPA Works Approval

**Paul Torre**  
**Senior Applied Scientist - Air & Odour**  
**Environmental Solutions**  
[Paul.Torre@epa.vic.gov.au](mailto:Paul.Torre@epa.vic.gov.au)



Environment  
Protection  
Authority Victoria



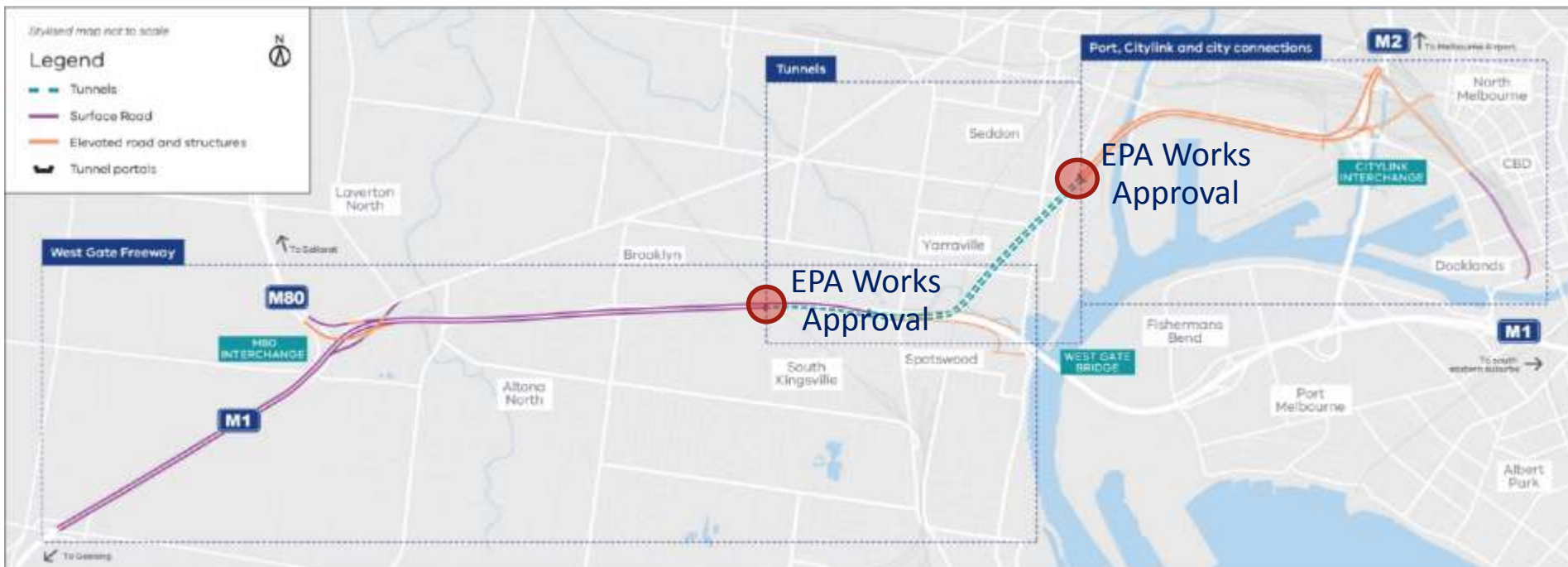
# EPA's Role

---

EPA is Victoria's environmental regulator. It exists to protect the environment and people by preventing, and reducing harm from pollution and waste.

- **Statutory decision maker** – Works Approval Application (Schedule 1 Section L03, road tunnel ventilation systems)
- **Independent State advisor** – Environment Effects Statement & Environmental Management

# EPA's role – Works Approval



# EPA's Works Approval assessment

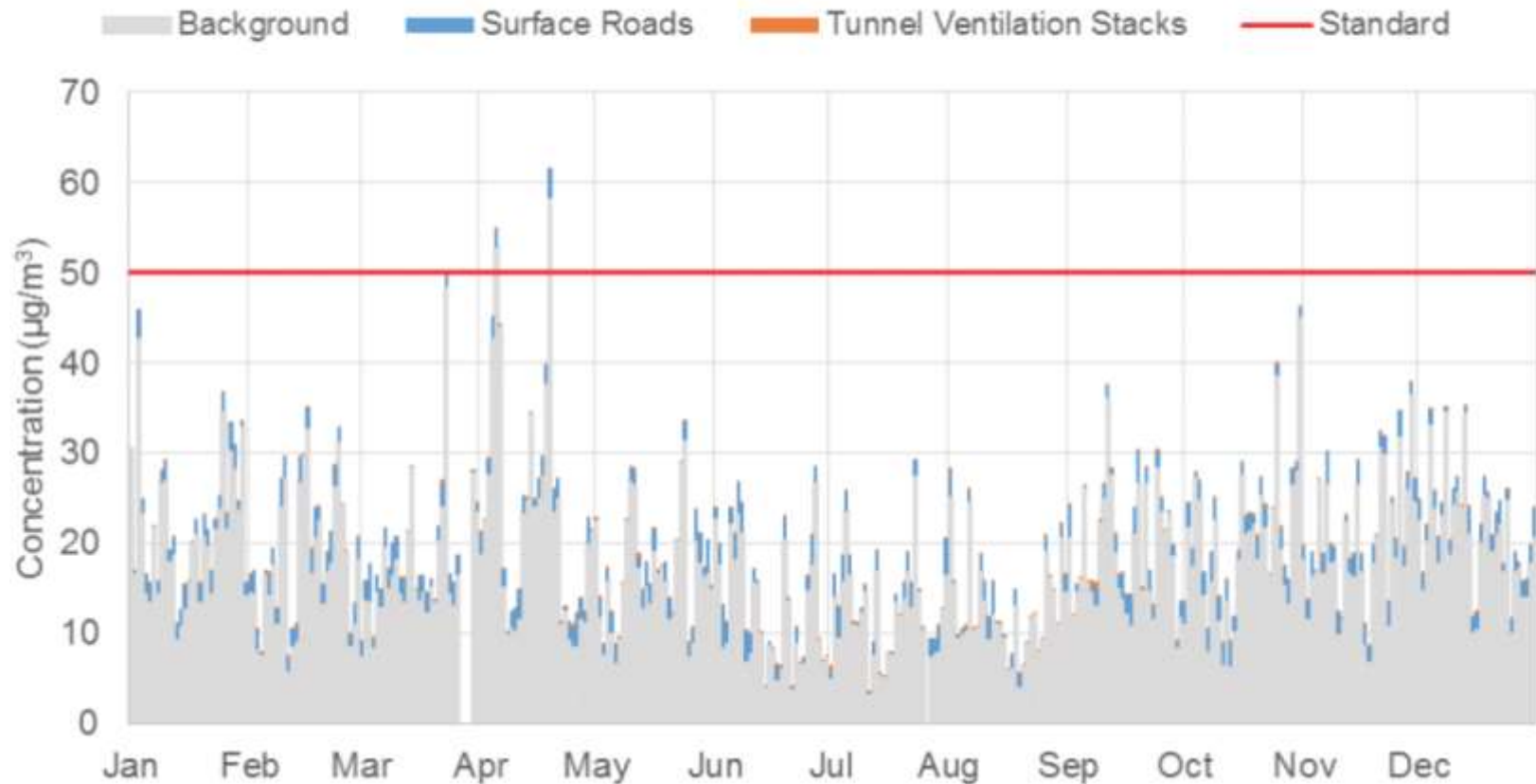
---

## Key findings Air Impacts

- Stack emissions meet the SEPP (AQM) requirements for all pollutants except  $PM_{10}$  - due to exceedance of the prevailing hourly background levels
- Predicted emissions will rarely contribute to hourly events exceeding the hourly design criteria (7% of design criteria)
- The  $PM_{10}$  24-hour average stack ventilation emissions were estimated to contribute less than 0.2% of the 24 – hour air quality guideline

# Air Quality (TVS Contribution)

24 hour PM<sub>10</sub> – Most impacted receptor (2031 project scenario)



# Tunnel emission controls

---

## Best Practice & design

- **Dispersion by tunnel design & ventilation system**

- High tunnel ventilation & exhaust gas emission rates
- High ventilation stack heights
- No portal emissions
- Air monitoring; Melbourne, Sydney, & Brisbane

## **M5 Pollution equipment installation – filtration**

- NSW trial shows no demonstrable improvement in PM levels in local area to justify installation
- Ambient air monitoring associated with CityLink, EastLink, NSW & QLD has not measured significant changes in local air quality
- GHG implications of using filtration

# EPA's Works Approval assessment

---

## Key Conditions

- Retrofitting of pollution control equipment
- Monitoring program for in-tunnel air quality and ventilation stack emissions
- Monitoring program for ambient air quality
- Provision for daily reporting of air monitoring results

# Questions & Discussion



Environment  
Protection  
Authority Victoria

