

# CLEM7 in-tunnel air quality

## Monthly trend report – July 2019

The table below sets out the in-tunnel air quality criteria for the Clem 7 tunnel as set out in the Coordinator General's Report.

- For the month of July 2019 no notable trends have emerged.

Table 1: In-tunnel air quality criteria

Parameter	Criteria
Carbon monoxide (CO)	70 ppm generally 90 ppm in peak traffic congestion
Nitrogen dioxide (NO <sub>2</sub> )	1 ppm (average)
Visibility coefficient (K)	0.005 m <sup>-1</sup> for free flowing traffic (greater than 50km/hr) 0.007 m <sup>-1</sup> otherwise

Notes:

1. Monitoring and measuring protocols for each criteria as set out in the PIARC guidelines, as current December 2012.
2. Tunnel sensor average concentrations reported for Carbon Monoxide and Nitrogen Dioxide.
3. Peak traffic congestion occurs when traffic flows are less than 10 km/h.
4. Visibility coefficient (K-value) may fluctuate with peak conditions.

Visibility

Figure 1: In-tunnel visibility extinction coefficient – Northbound (15 minute averaged data)

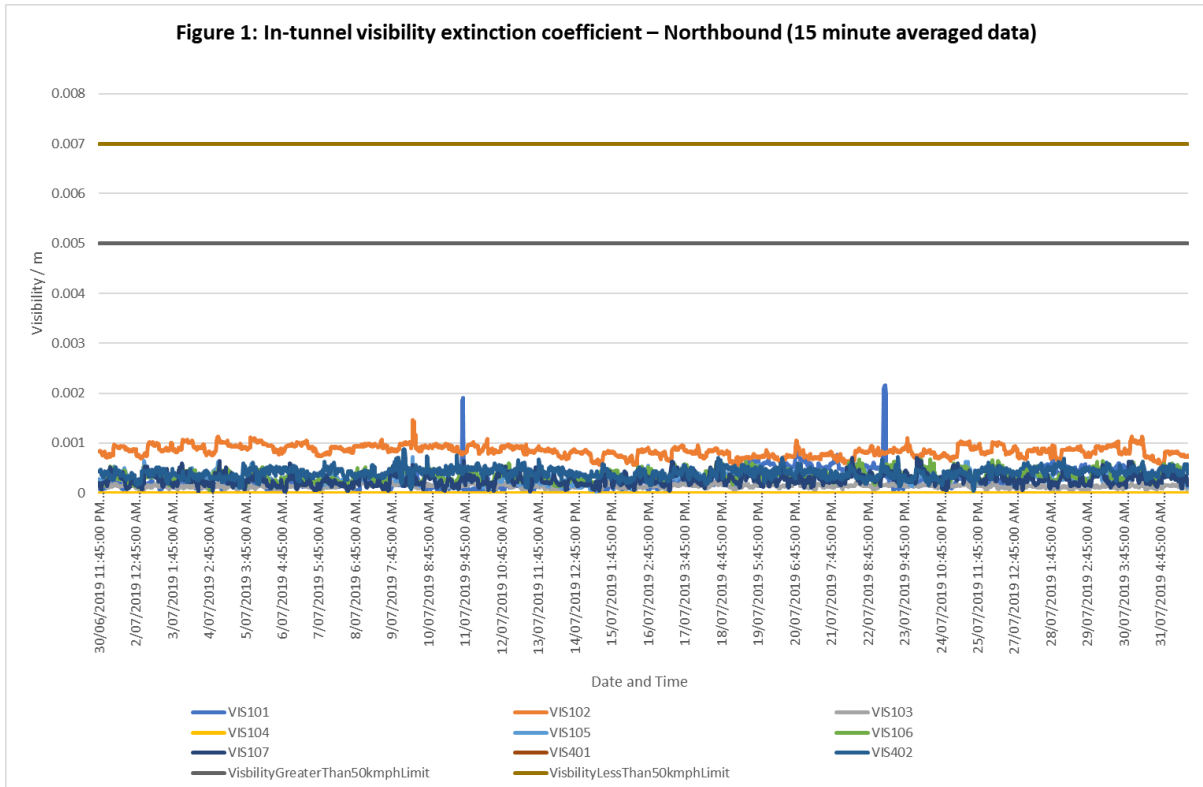
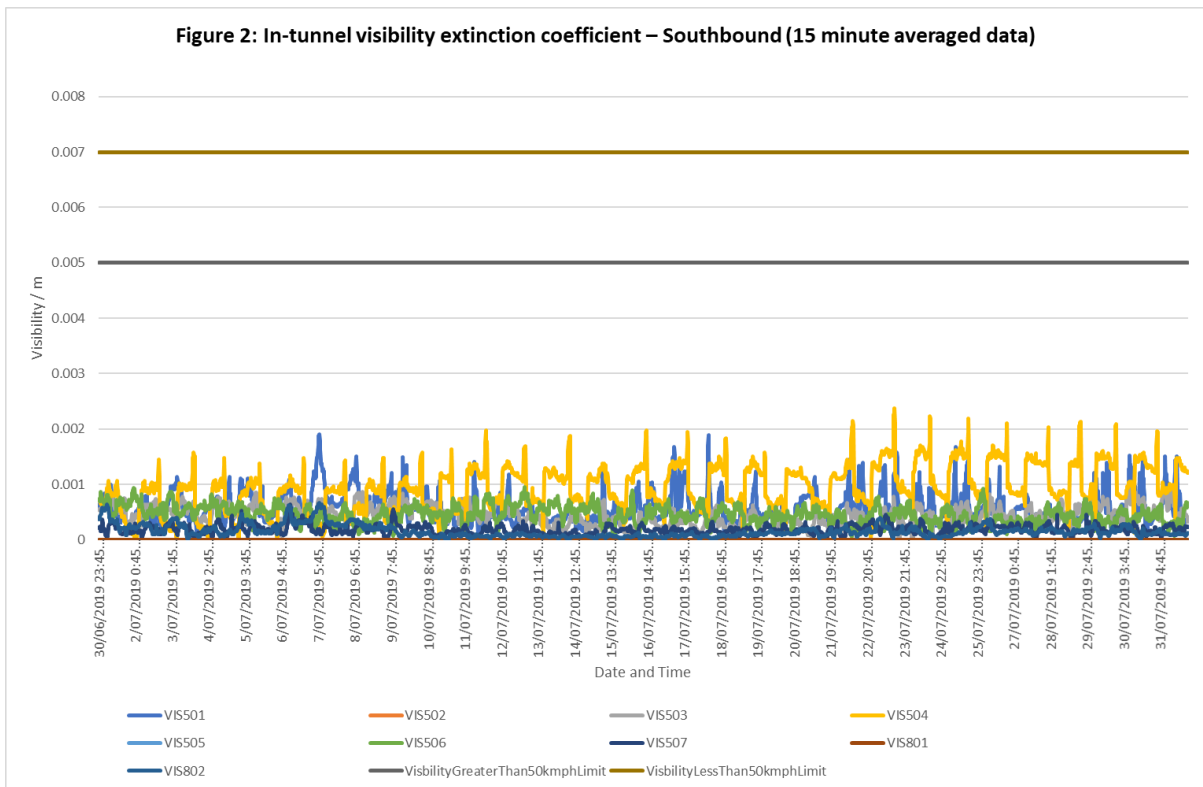


Figure 2: In-tunnel visibility extinction coefficient – Southbound (15 minute averaged data)



## Carbon monoxide

Figure 3: In-tunnel Carbon Monoxide (CO) Concentrations - Northbound (15 minute averaged data)

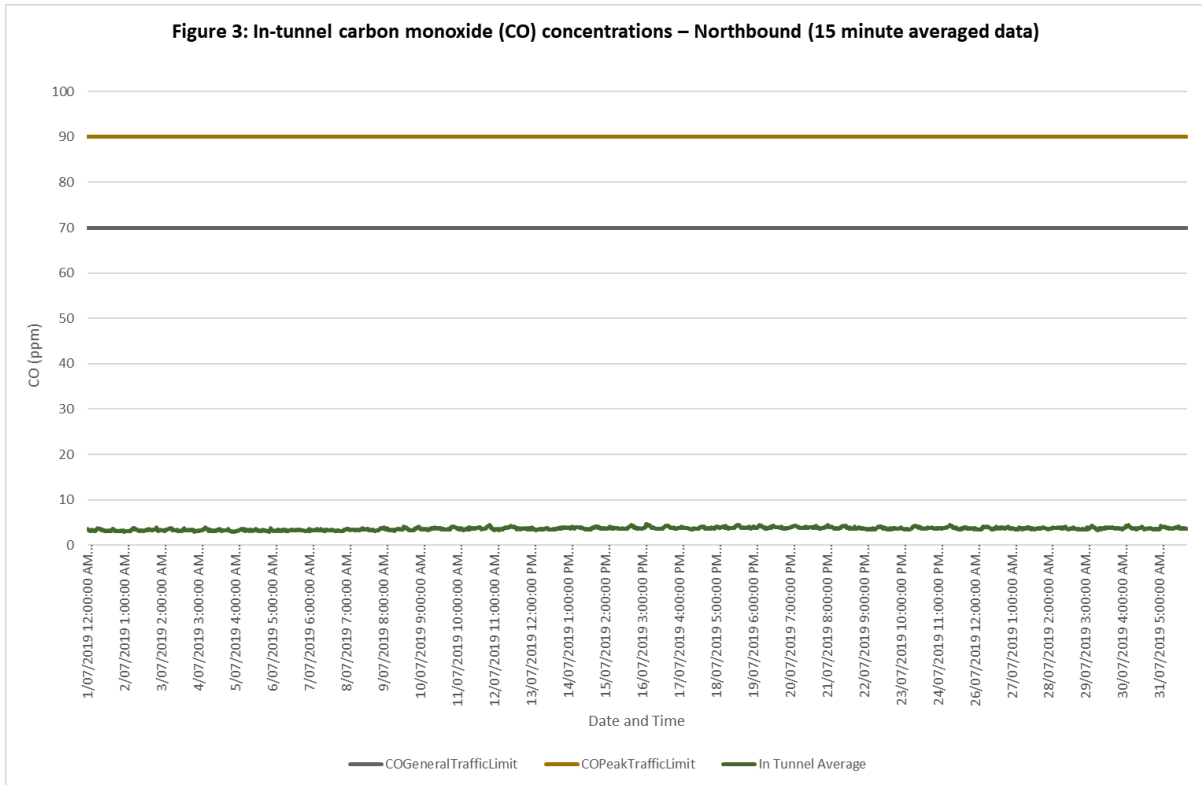
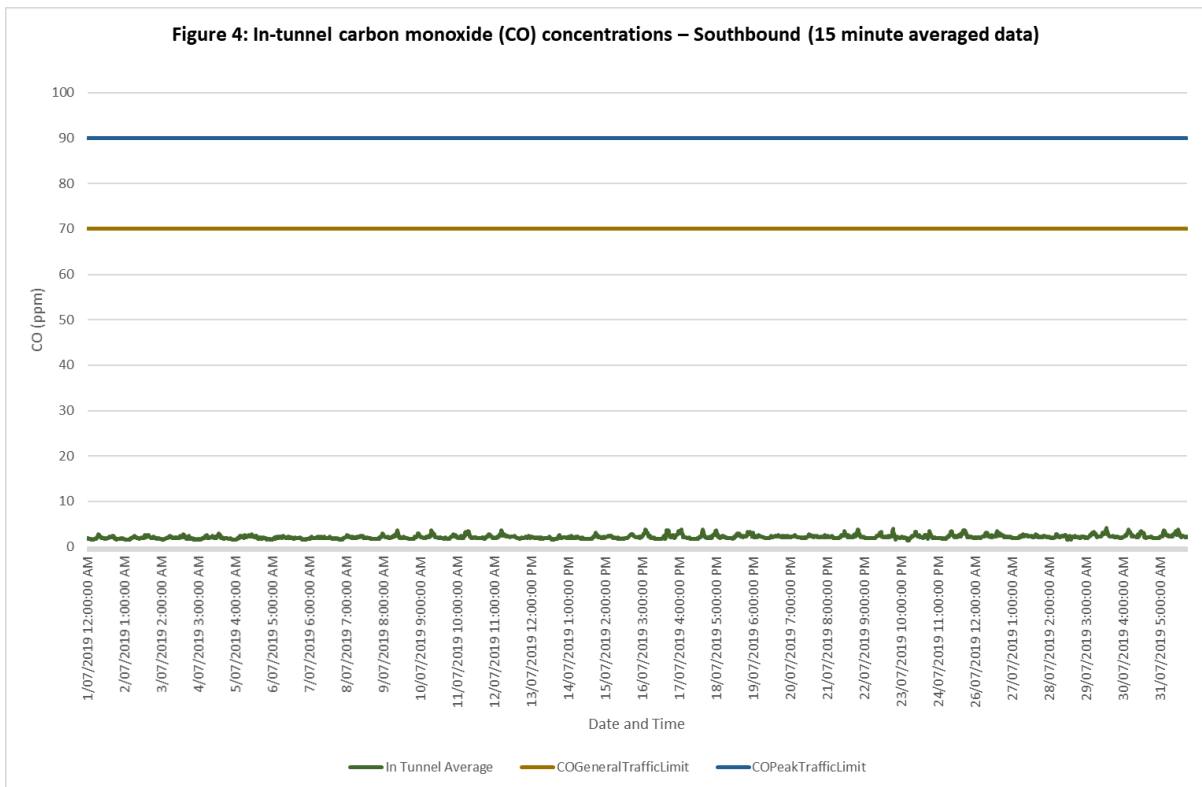


Figure 4: In-tunnel Carbon Monoxide (CO) Concentrations - Southbound (15 minute averaged data)



## Nitrogen dioxide

Figure 5: In-tunnel Nitrogen Dioxide (NO<sub>2</sub>) Concentrations - Northbound (15 minute averaged data)

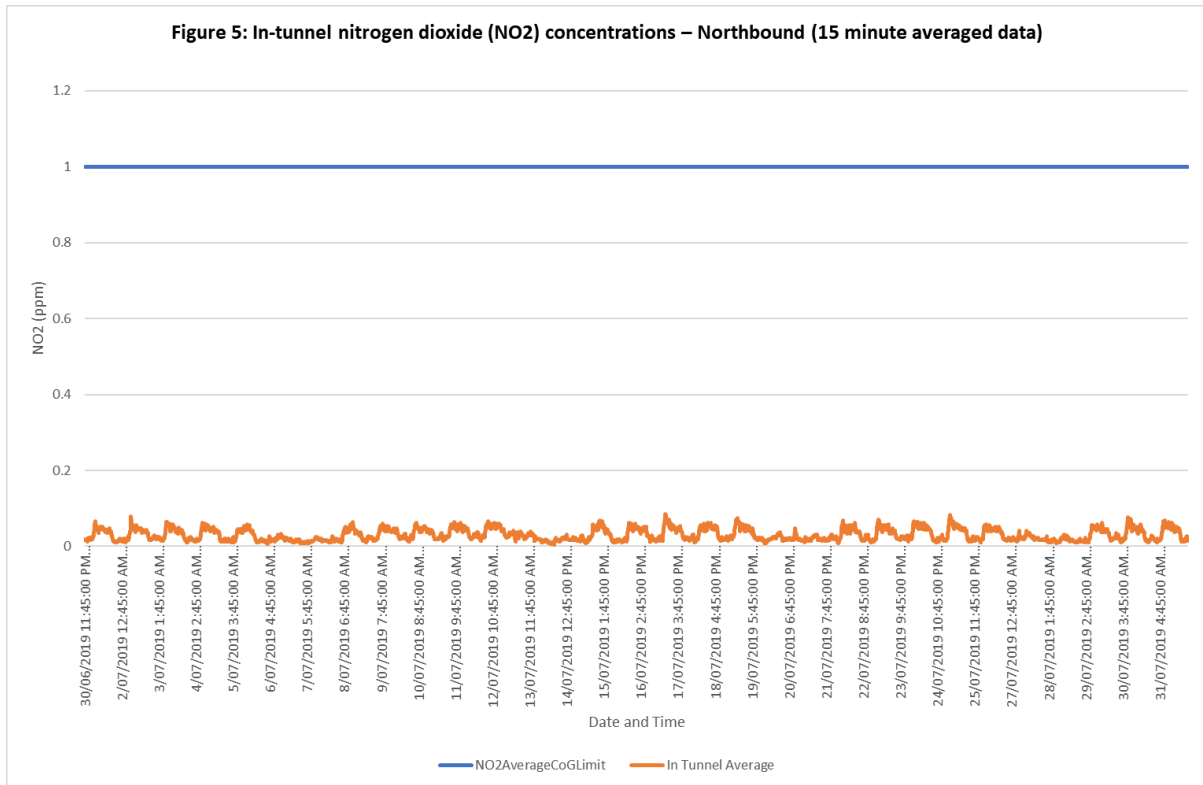


Figure 6: In-tunnel Nitrogen Dioxide (NO<sub>2</sub>) Concentrations - Southbound (15 minute averaged data)

