Legacy Way in-tunnel air quality

Monthly trend report – July

The table below sets out the in-tunnel air quality criteria for the Legacy Way tunnel as set out in the Environmental Authority (EPPR02587314).

- For the month of July 2017 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_2)	1 ppm (average)
Visibility coefficient (K)	0.005 m^{-1} for free flowing traffic (greater than 50km/hr) 0.007 m^{-1} otherwise

Notes:

1. Monitoring and measuring protocols for each criteria as set out in the PIARC guidelines, as current December 2009.
2. Peak traffic congestion occurs when traffic flows are less than 10 km/h
3. Visibility coefficient (K-value) may fluctuate with peak Conditions.

Visibility

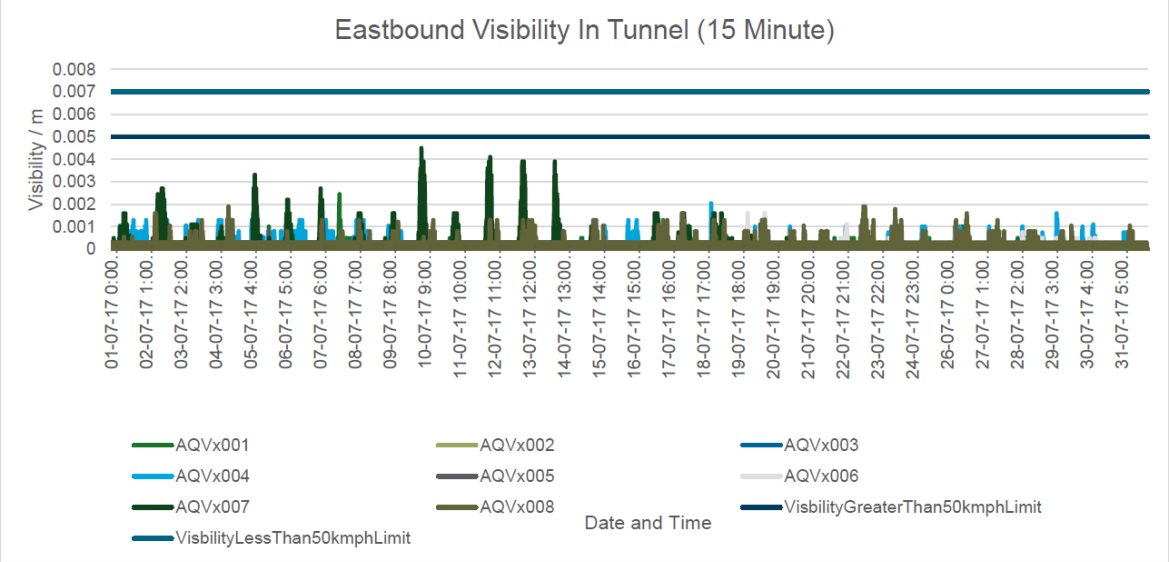

Figure 2 - In-Tunnel Visibility / Extinction Coefficient Eastbound (15 minute averages)

Note that the spikes for AQVx007 are likely related to sun strike on the sensor. No notes from Operator Log as investigations are triggered on approach alarms for the exceedance criteria, which were not reached for the above spikes. The sun is reflecting off a newly built building in the valley, which reflects sunlight toward the eastern portal.

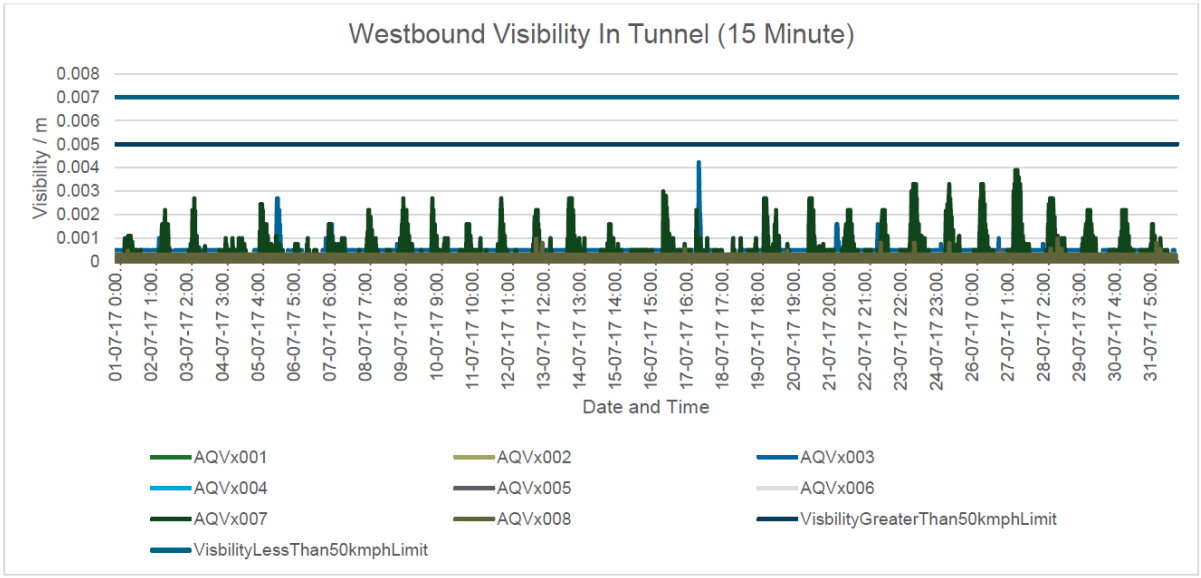

Figure 3 - In-Tunnel Visibility/ Extinction Coefficient Westbound (15 minute averages)

Note that the spikes for AQVx007 are likely related to sun strike on the sensor. No notes from Operator Log as investigations are triggered on approach alarms for the exceedance criteria, which were not reached for the above spikes.

Carbon monoxide

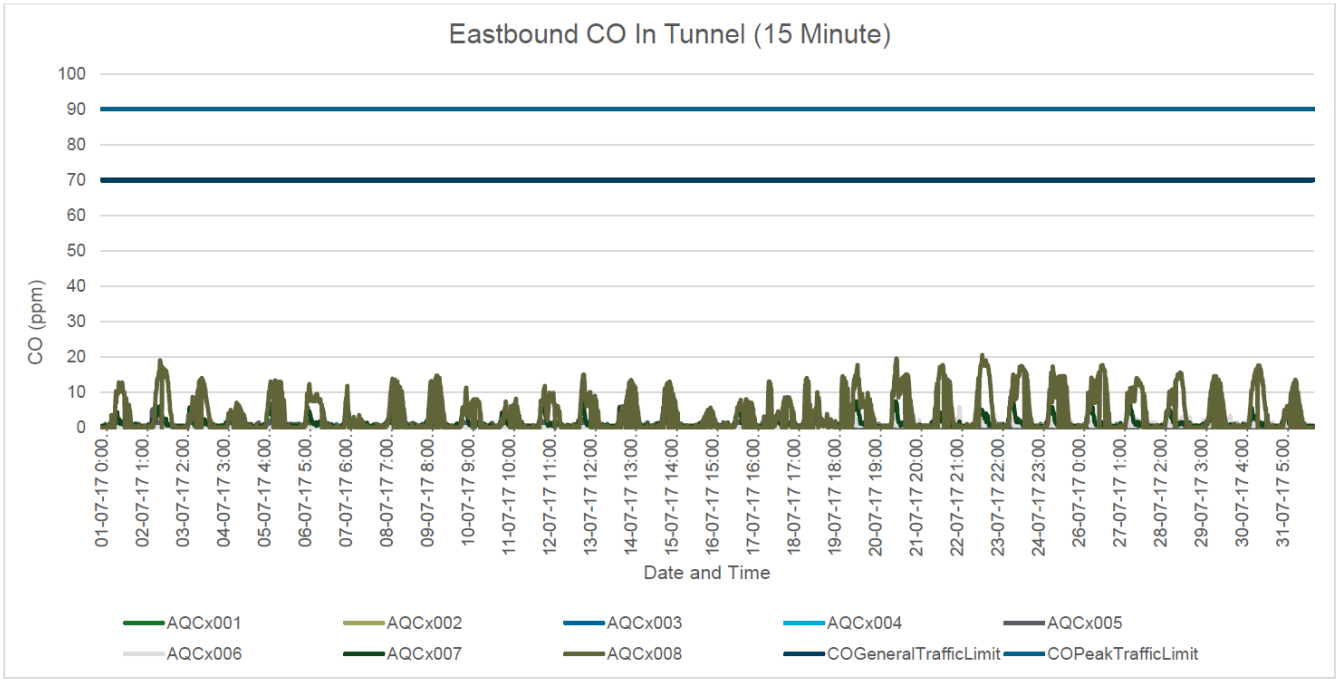

Figure 4 - In-Tunnel CO Eastbound (15 minute averages)

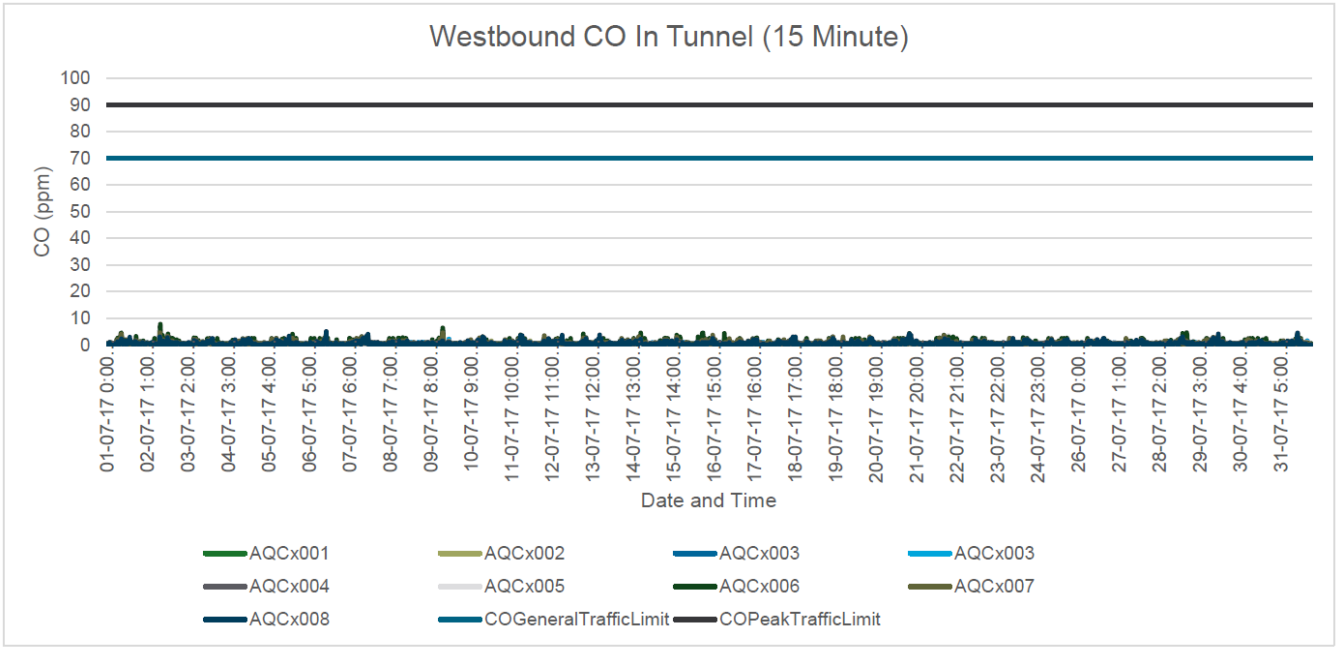

Figure 5 - In-Tunnel CO Westbound (15 minute averages)

Nitrous oxide

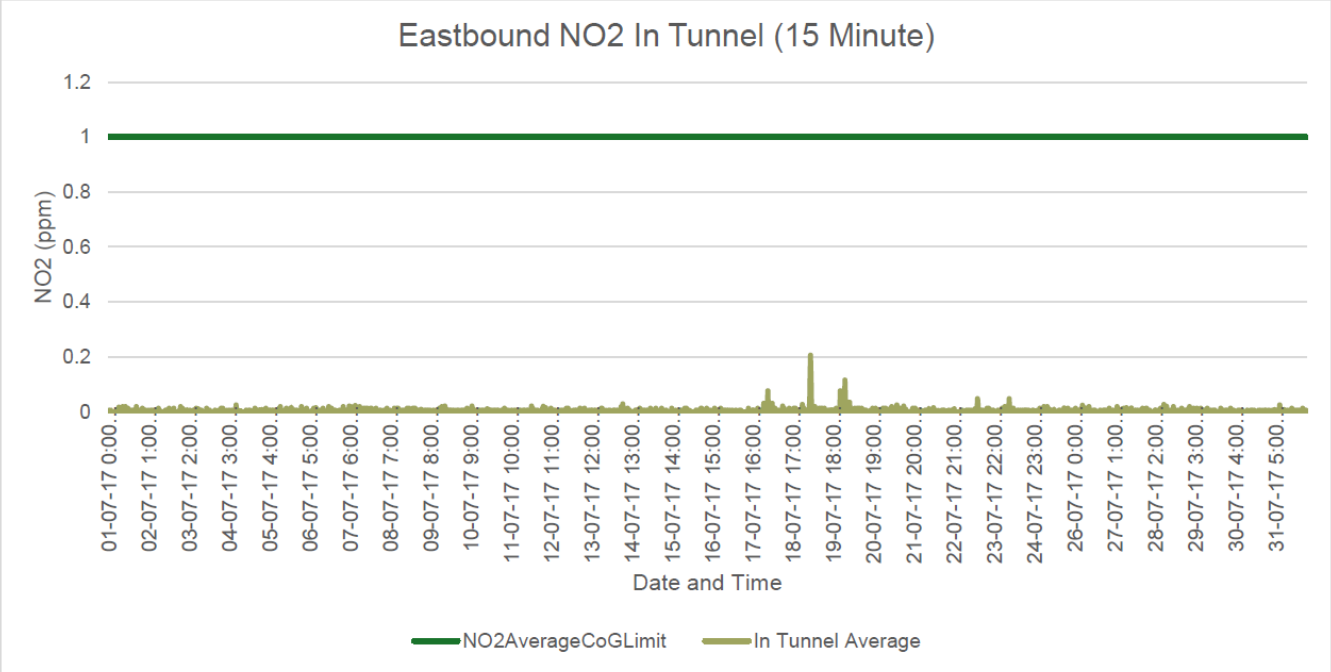

Figure 6 - In-Tunnel NO2 Eastbound (15 minute averages)

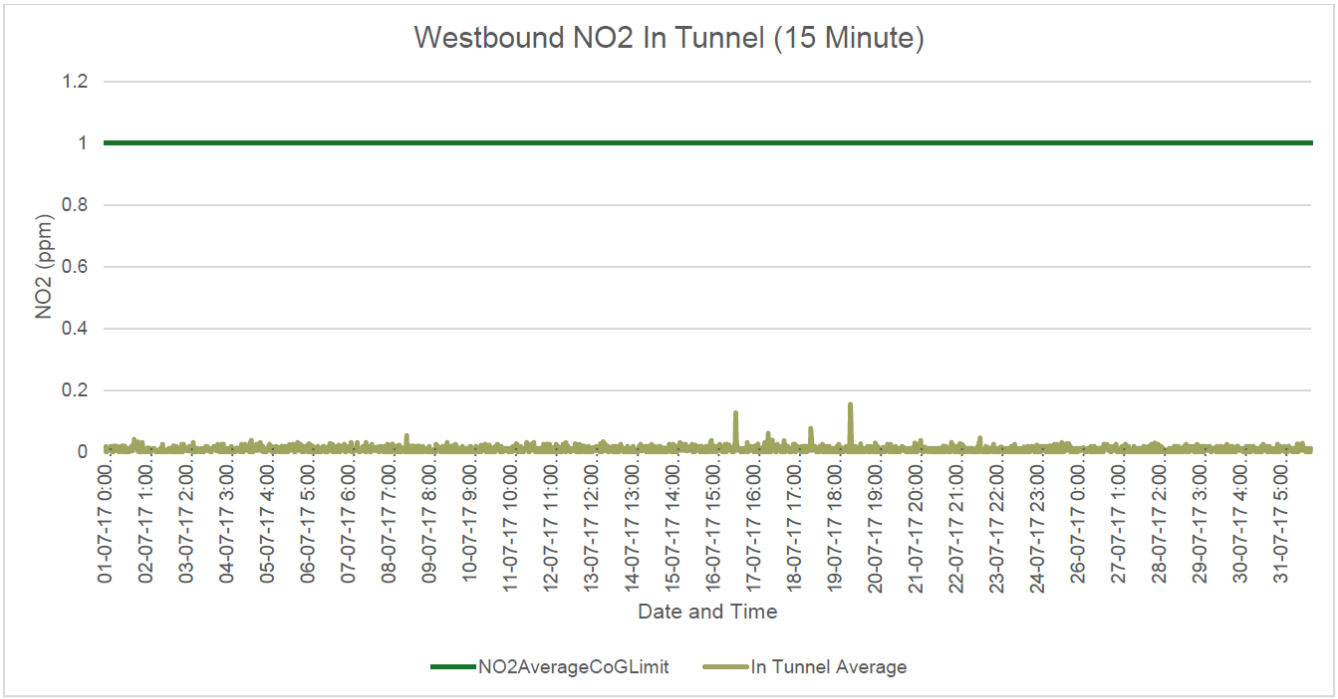

Figure 7 - In-Tunnel NO2 Westbound (15 minute averages)