

CLEM7 in-tunnel air quality

Monthly trend report – August 2018

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 August 2018 no notable trends have emerged.

Table 1: In-tunnel air quality criteria

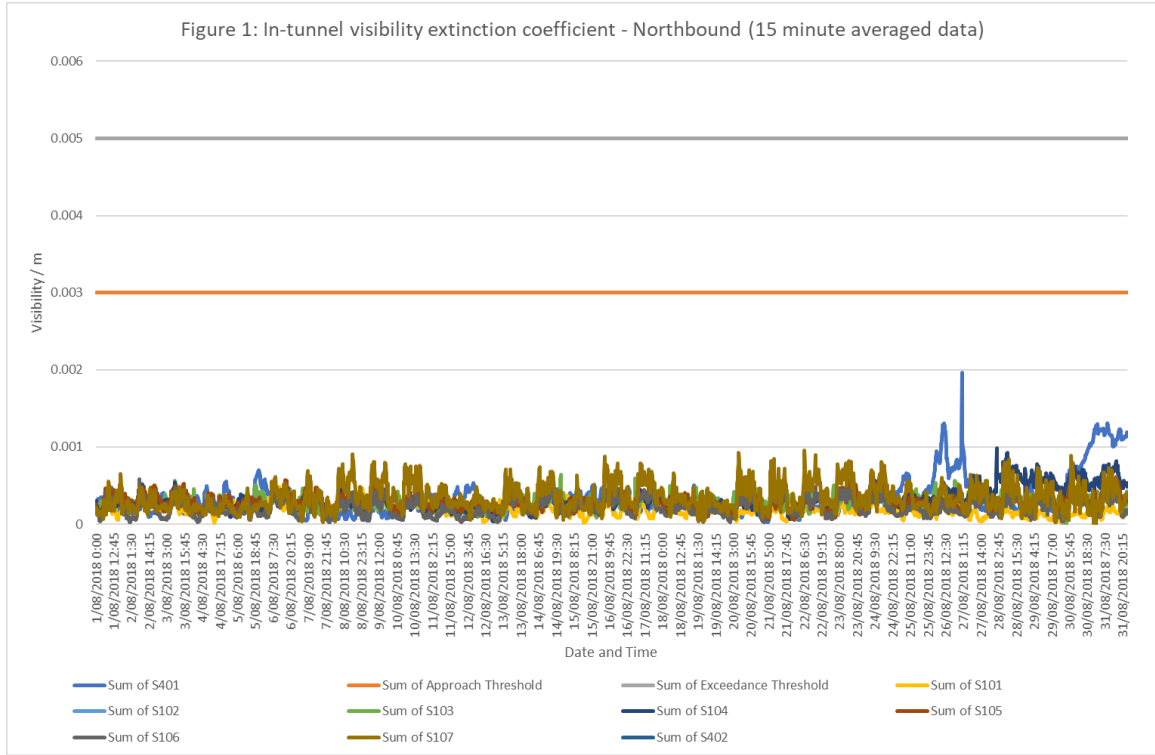
Parameter	Criteria
Carbon monoxide (CO)	70 ppm generally 90 ppm in peak traffic congestion
Nitrogen dioxide (NO ₂)	1 ppm (average)
Visibility coefficient (K)	0.005 m ⁻¹ for free flowing traffic (greater than 50km/hr) 0.007 m ⁻¹ otherwise

Notes:

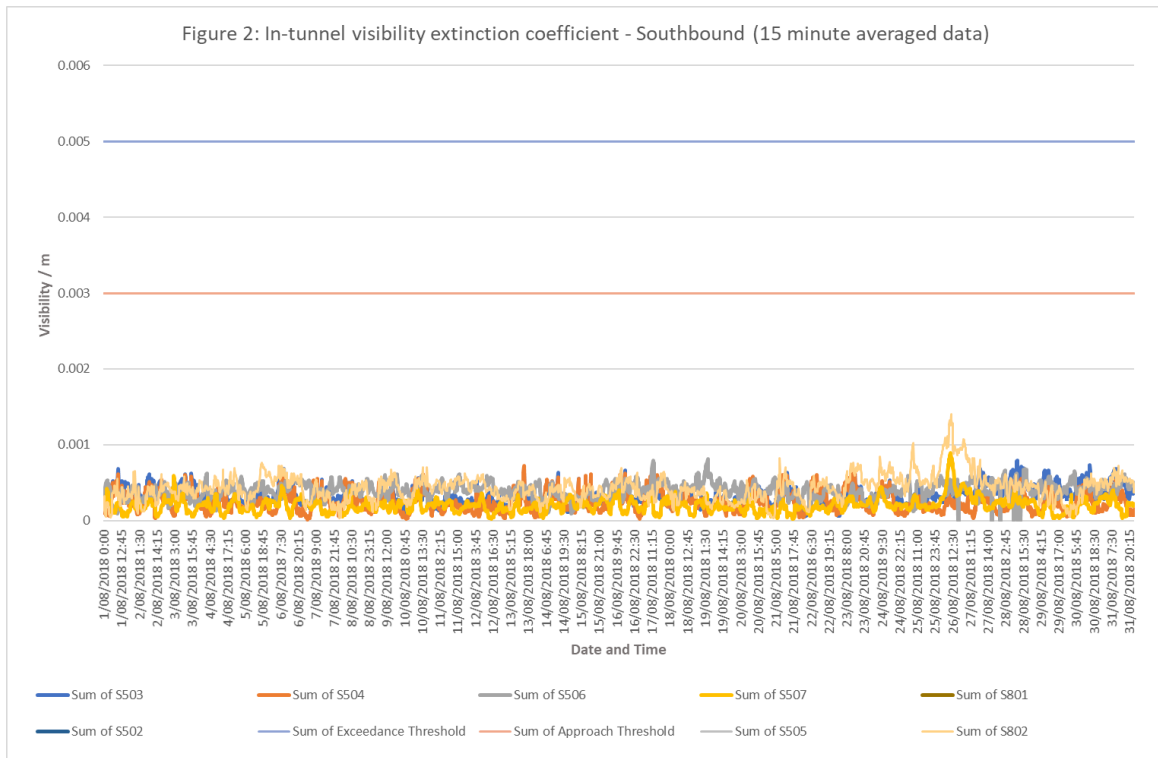
1. Monitoring and measuring protocols for each criteria as set out in the PIARC guidelines, as current December 2009.
2. Peak traffic congestion occurs when traffic flows are less than 10 km/h.
3. Visibility coefficient (K-value) may fluctuate with peak conditions.

CLEM7 IN-TUNNEL AIR QUALITY

Visibility



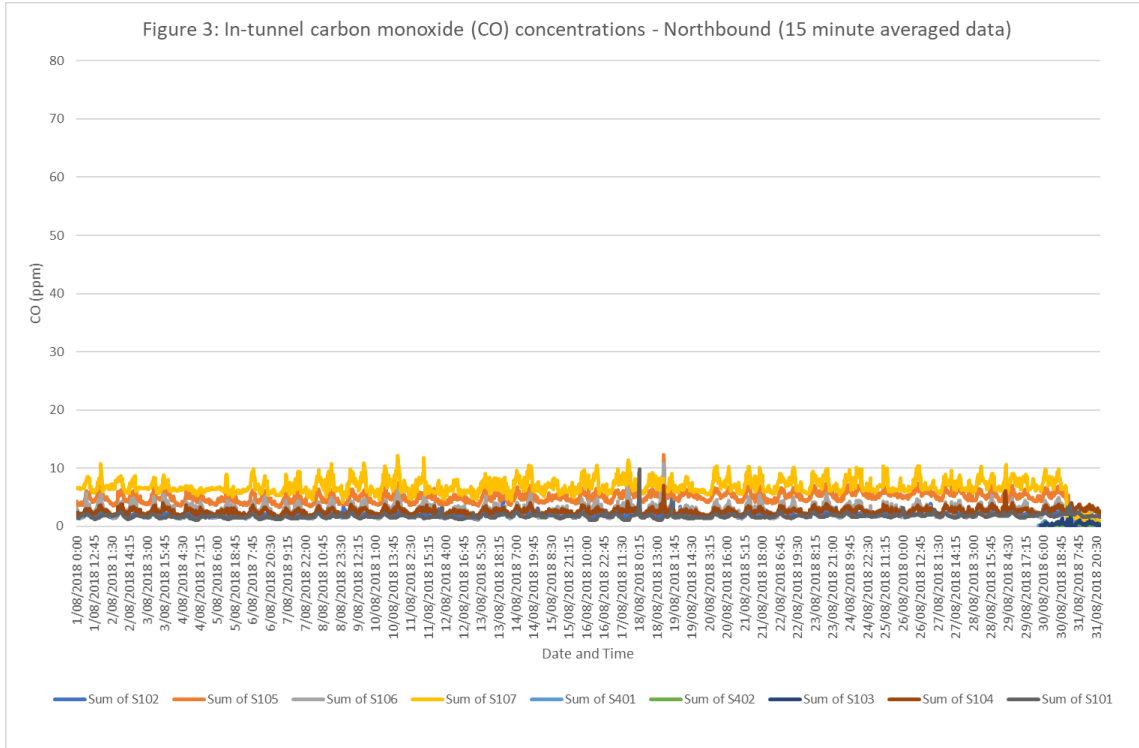
S402 is removed from the tunnel for refurbishment and re-installed in early September during tunnel closure. No data available for this instrument. S102 data has been invalidated due to instrument fault. Corrective maintenance was performed during tunnel closure on 31 August 2018. Valid data recorded from this date.



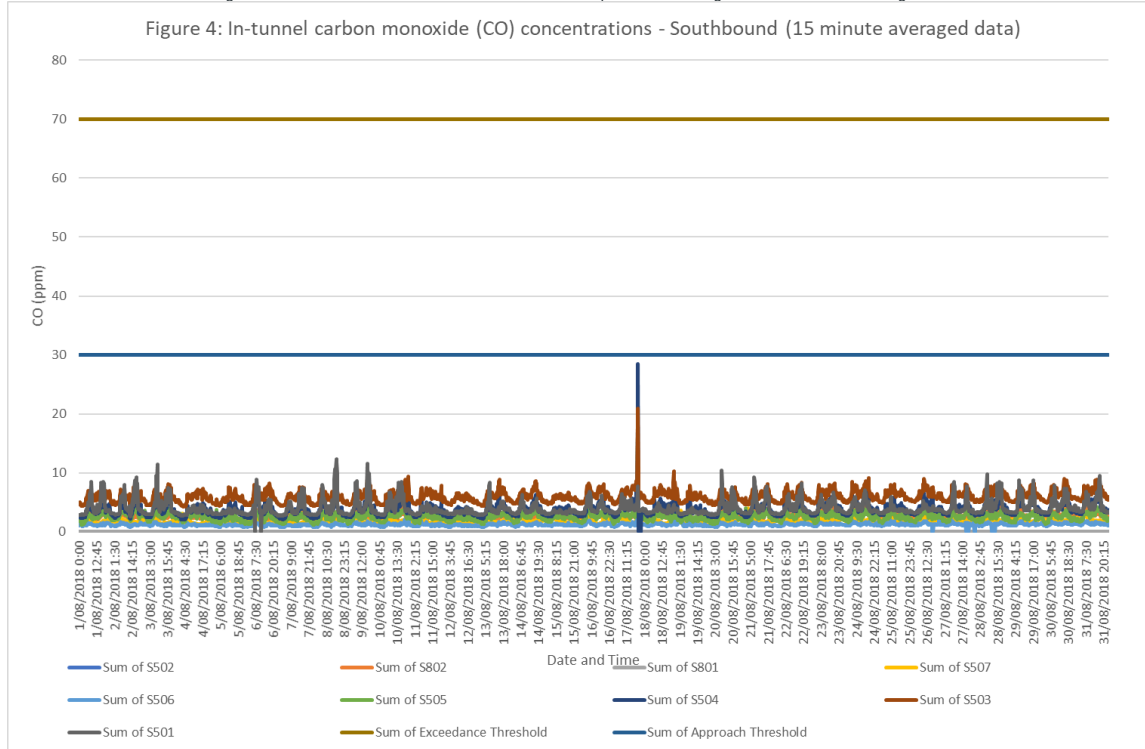
S501 data has been invalidated for August due to instrument fault. Corrective maintenance occurred in early September during tunnel closure. S502 has been removed from the tunnel for refurbishment. No data available. Sensor was re-installed in early September during the tunnel closure. S801 has been removed from the tunnel for refurbishment. No data available. Sensor was re-installed in early September during the tunnel closure.

CLEM7 IN-TUNNEL AIR QUALITY

Carbon monoxide



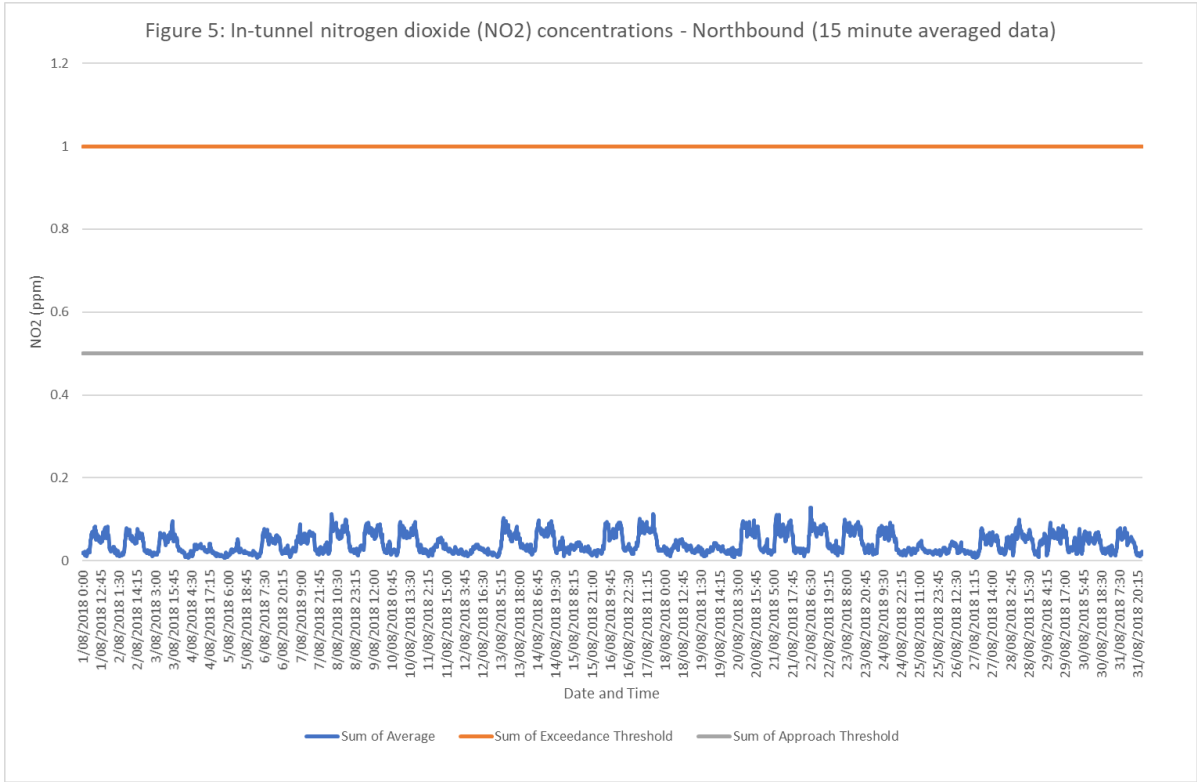
S401 data invalidated to 30 August 2018 due to instrument fault. Corrective maintenance and calibration performed during tunnel closure late August 2018. Valid data being recorded from this date.
 S402 removed from tunnel for refurbishment. Re-installed 30/8/2018 and valid data being recorded from this date.
 S105, S107 & S106 showing signs of high baseline. Corrective maintenance performed during tunnel closure in late August 2018 and baseline adjusted down.
 S103 data invalidated to 30 August due to instrument fault. Corrective maintenance performed during tunnel closure in late August 2018. Valid data recorded from this date.



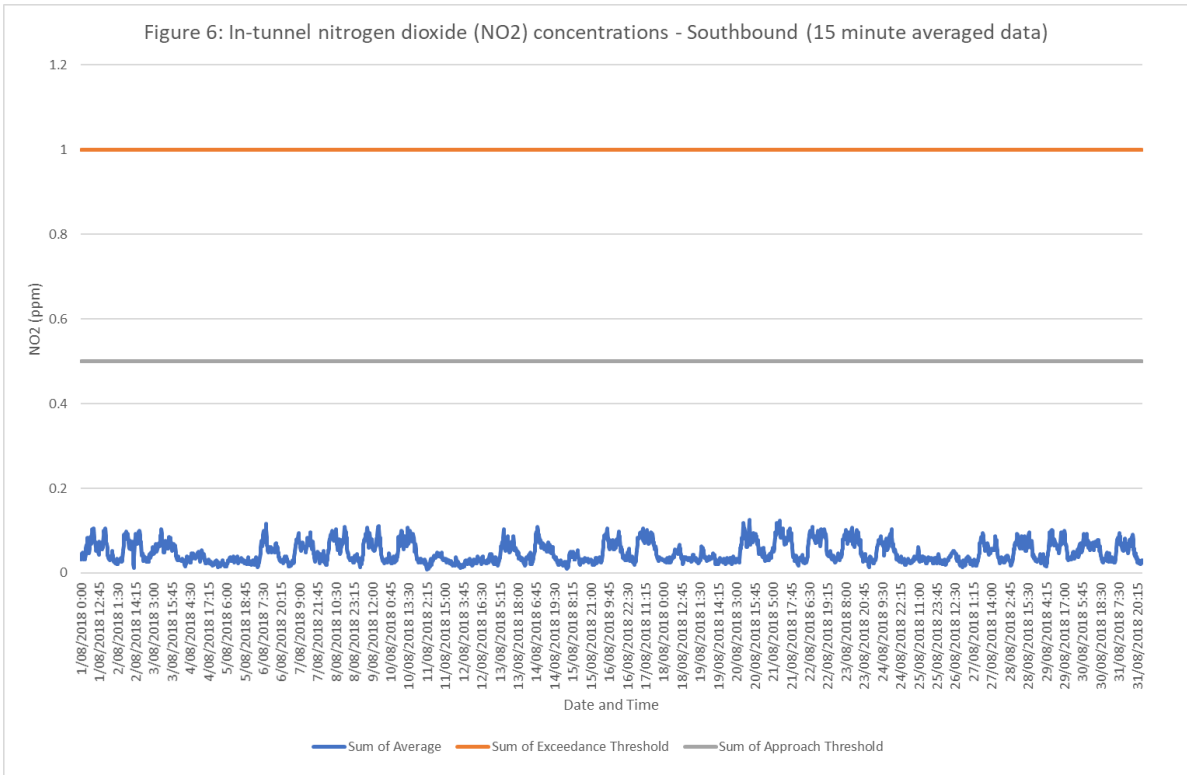
S502 and S801 removed from the tunnel for refurbishment. No data available. Instrument was re-installed in early September 2018 during tunnel closure.
 S501 and S503 displaying high baselines. Corrective maintenance performed in early September 2018 during tunnel closure.

CLEM7 IN-TUNNEL AIR QUALITY

Nitrogen dioxide



S402 removed from tunnel for refurbishment. Sensor was re-installed in early September during tunnel closure.



S502 and S801 removed from tunnel for refurbishment. No data available. Sensors were re-installed in early September during tunnel closure. S501 data invalidated for August due to instrument fault. Corrective maintenance was performed in early September at tunnel closure.