

Legacy Way air quality data for 29 January 2018

Designated contact person – Damon Newling, HSE Lead (mobile - 0400 758 818)

Location of the release: West Ventilation Stack Outlet (VSO) –Legacy Way

Date and time of release: 09:00 Monday 29 January 2018

Time operator became aware of release: 09:06 Monday 29 January 2018

Suspected cause of the release: Member of public light truck with heavily smoking motor accessing the tunnel

Resulting effects: No clear impact to ambient air quality

Monitoring results: Provided below

Actions taken: Ventilation functioned to maintain in-tunnel air quality, no further action required.

Incident summary

The one hour average for PM10 within the West Ventilation Stack Outlet exceeded the criteria (1mg/m3) set in condition A11 of Environmental Authority EPPR02587314, recorded as being 1.477mg/m3 at 09:00.

The Legacy Way control room identified that a small truck emitting significant amounts of smoke was observed on the exit ramp of the west bound tube at 08:32 (see picture below). There were no other potential sources of particulates identified for the time. The PM10 values recorded in the West VSO returned to well below the criteria for the 10:00 one hour average data point.

There were no apparent elevated readings for PM2.5 or PM10 at the ambient air quality monitoring stations to correlate to the elevated VSO PM10 reading. The in-tunnel air quality sensors did record some slightly elevated values around the time for NO2, but not for the visibility coefficient.

All available evidence suggests that the elevated PM10 reading in the West VSO was likely associated with the smoke emitted from the member of public light truck, with no causal factors relating to the operation of the tunnel ventilation system.

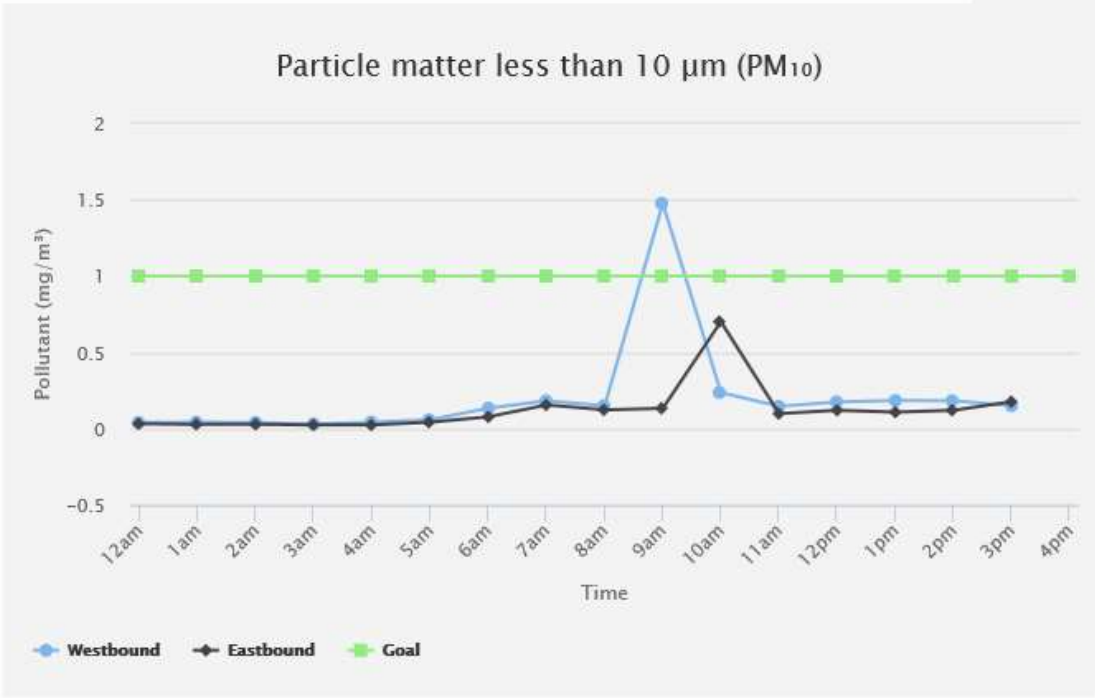
The obligation to make publically available results of air quality monitoring that exceeds the in-tunnel air quality criteria (conditions A10 and A14) is taken to have been met via the on-line results charts, as provided below in this report.



Ventilation stack monitoring results

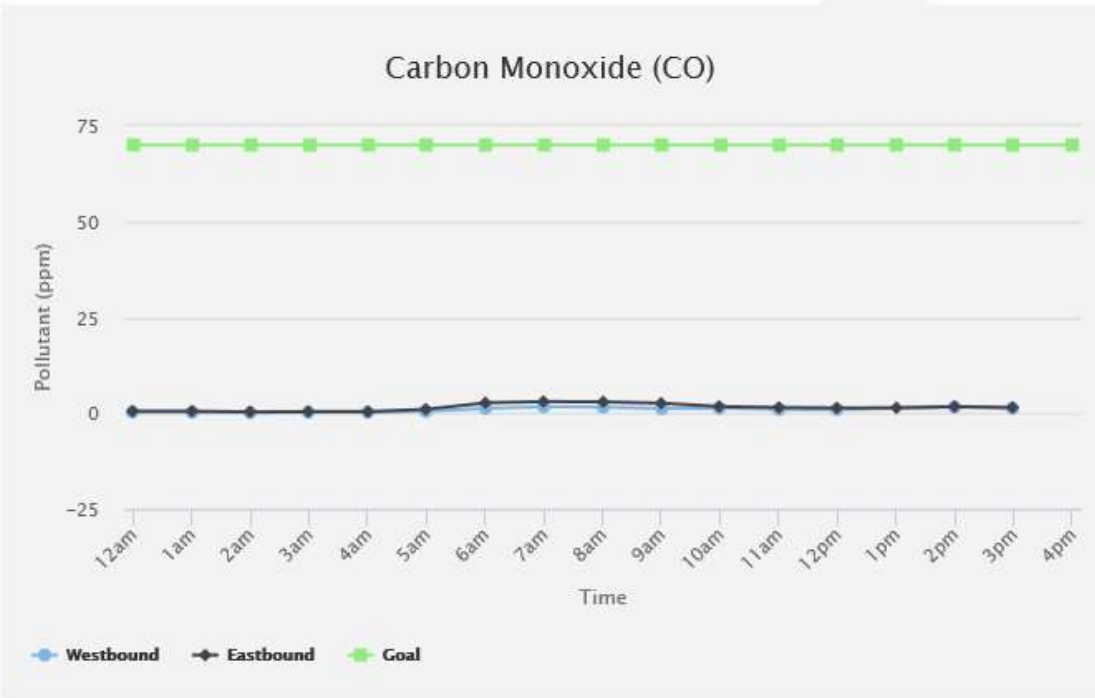
29th January 2018

CO NO₂ **PM₁₀**



29th January 2018

CO NO₂ PM₁₀

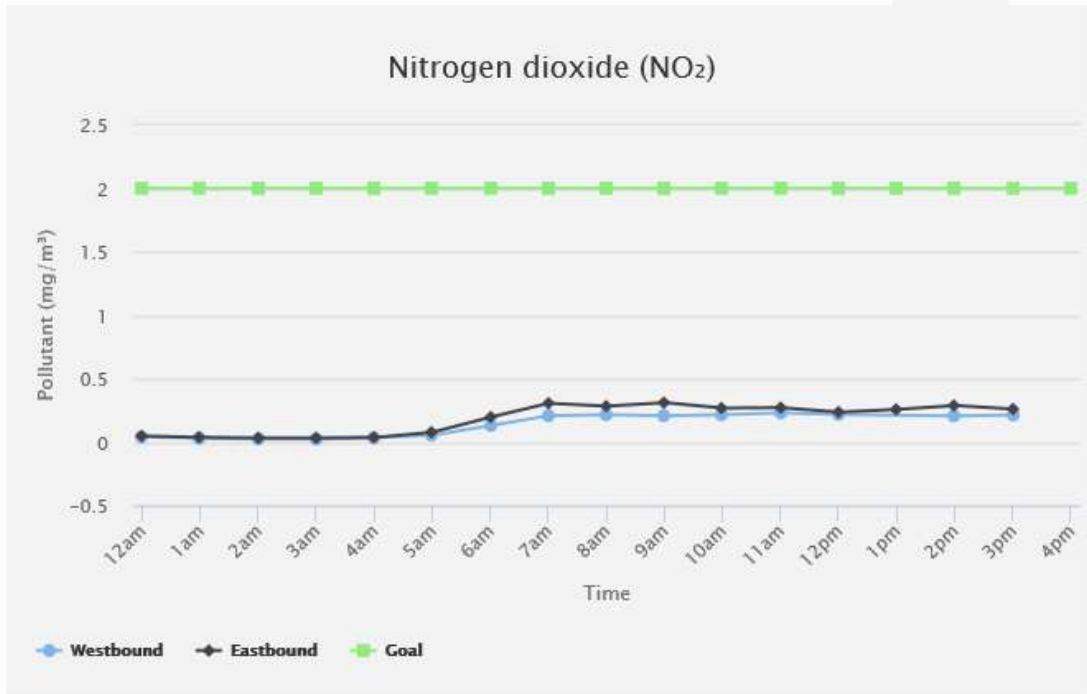


29th January 2018

CO

NO₂

PM₁₀



Ambient air quality monitoring results

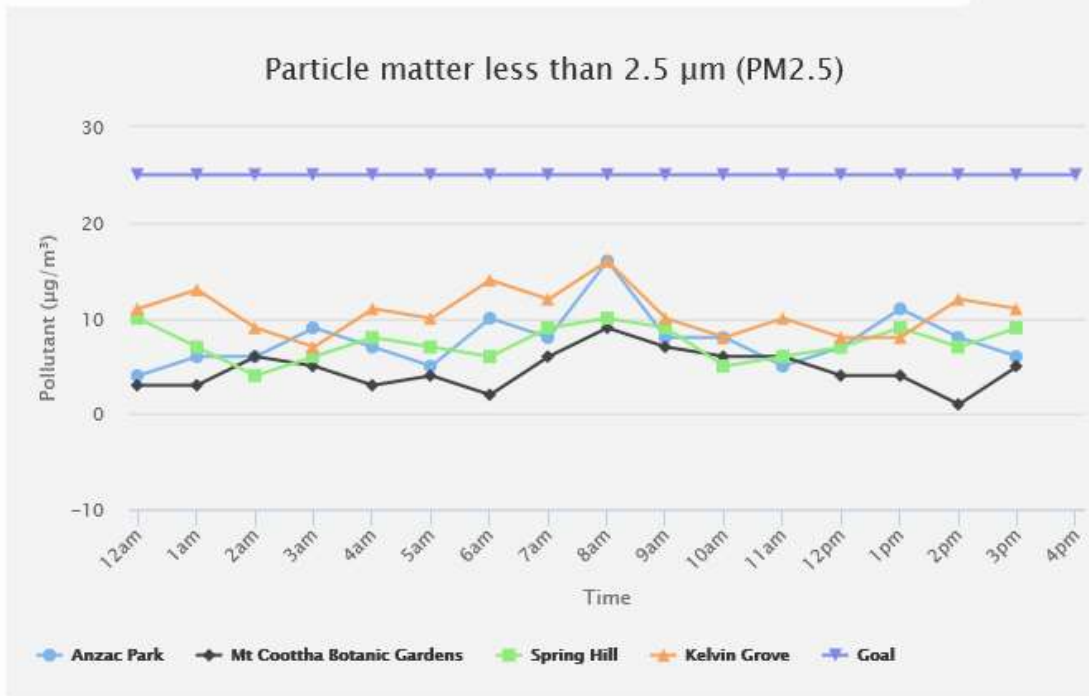
29th January 2018

CO

NO₂

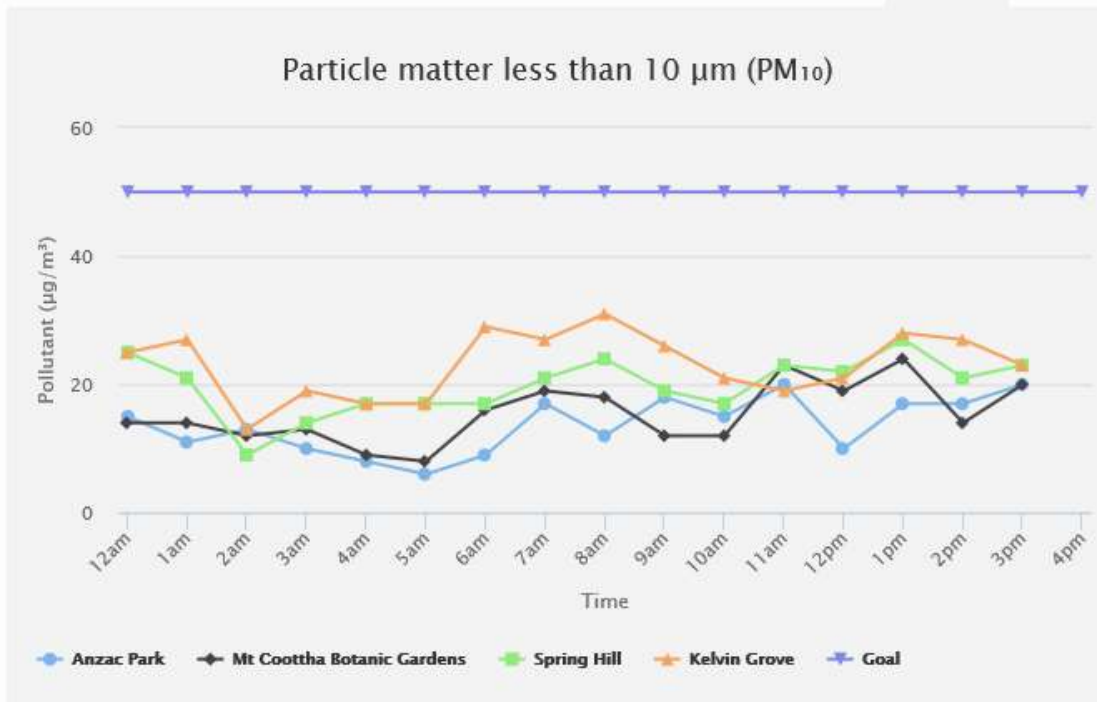
PM₁₀

PM_{2.5}



29th January 2018

CO NO₂ PM₁₀ PM_{2.5}



In-tunnel monitoring results

29th January 2018

CO NO₂ K



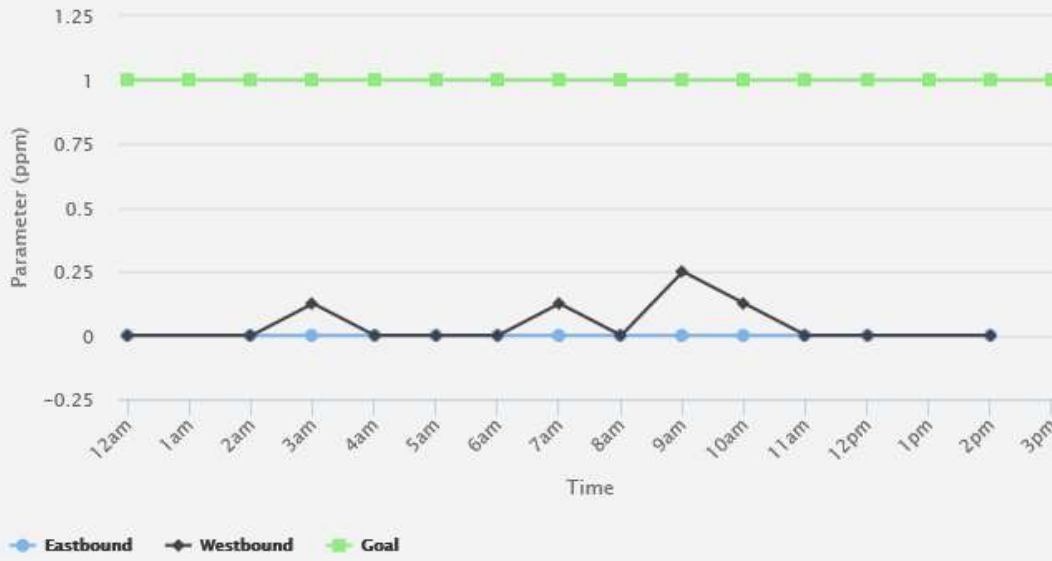
29th January 2018

CO

NO₂

K

Nitrogen dioxide (NO₂)



29th January 2018

CO

NO₂

K

Visibility (K)

