Hi David,

Please see below response from ERM - I trust that this responds to the question from our end. I have also copied James Grieve from ERM into this email to discuss further as required.

I've had a look at the comment from DPE. I think a key element to note is that the proposed monitoring will be measuring ambient air, not just the contribution from the Cross City Tunnel Vent (CCTV). Hence the monitoring response levels need to accommodate existing concentrations measured in ambient air within Sydney, whilst also being protective of health to occupants within the rooftop area.

Accordingly, we have nominated the EPA impact assessment criterion of 246 µg/m³ as the response level (sourced from the NSW Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/air/approved-methods-for-modelling-and-assessment-of-air-pollutants-in-nsw-160666.pdf?la=en&hash=D4131297808565F94E13B186D8C70E7BD02B4C3D), as this is a level endorsed by NSW EPA as protective of health. The application of this criterion on a sub-hourly basis permits a progressive response such that occupant exposure can be managed ahead of the criterion being exceeded.

Concentrations measured in Sydney, typically range up to 130 µg/m³ (on a 1 hour average).

The criterion of 150 µg/m³ within the CCTV protocol applies to the CCTV impact in isolation of other (local and regional) sources. Allowance for background is made to accommodate the NSW EPA criterion as per the extract below:

> *The air quality goal for nitrogen dioxide is 246 micrograms per cubic metre (µg/m³) based on a one hour average. In this protocol:*
>
> - *A background concentration for nitrogen dioxide of 96 µg/m³ is used based on the approach adopted in the EIS; and*
> - *To meet the goal of 246 µg/m³ the contribution from the CCT stack cannot therefore exceed 150 µg/m³.*
>
> *NB. In the EIS, a background nitrogen dioxide concentration of 100 µg/m³ was assumed based on historic air quality monitoring data In this protocol the background value has been refined to 96 µg/m³ to provide a precise agreement with the air quality goal of 246 µg/m³ based on a maximum predicted concentration of 150 µg/m³. Monitoring at elevated receptors conducted in 2005 and 2006 during the initial operational phase of the CCT, showed that over 99.5% of hourly measurements of nitrogen dioxide were below 96 µg/m³*

I hope that this provides adequate context to progress this.

Regards,

James Grieve

Senior Consultant

If you have any further questions, don't hesitate to get in touch.

Kind regards,

Tim

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