

## AIR QUALITY AND EASTLINK

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### INTRODUCTION

EPA is currently assessing the proposed impact of emissions from the EastLink tunnels on local air quality. This bulletin provides a summary of three publicly available reports (see further reading), which provide the current understanding and knowledge of air quality in the eastern suburbs (pre-construction), near roads, and from tunnel emissions.

### AIR QUALITY IN THE EASTERN SUBURBS

To help understand air quality near the EastLink corridor (pre-construction), EPA has analysed data from its air monitoring stations (see Figure 1) at Box Hill, Mooroolbark, Dandenong, Alphington, and Nunawading (at the busy intersection of Springvale and Whitehorse Roads) and compared it against national and Victorian air quality objectives.

Air quality across the eastern suburbs of Melbourne is usually good and generally meets air quality objectives. On occasions the eastern suburbs experience high particle levels due to windblown dust. Pollution from particles remains an issue that EPA has identified for further study.



**Figure 1: Monitoring sites and EastLink**

EPA's monitoring data was also compared to monitoring performed by VicRoads at two sites (New Street and Schwerkolts Cottage) near the eastern portal of the EastLink tunnels. Air quality near the tunnels is generally good and similar to that at other monitoring stations in the eastern suburbs.

Full details of the monitoring comparison performed are presented in EPA Publication 1006, *Review of air quality near EastLink*.

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## AIR QUALITY NEAR ROADS

Motor vehicles are a major source of air pollution in suburban Melbourne. Vehicle exhaust emissions contain both particles and gaseous pollutants. Vehicle emissions affect regional air quality and can lead to a localised build-up of pollutants in calm conditions. Despite increased motor vehicle usage, improvements in vehicle design and new fuel standards are contributing to reductions in emissions.

Results from a number of EPA roadside studies indicate that within a short distance from a road air quality objectives are generally met (see forthcoming EPA Publication, *Review of air quality near open roads*).

Air quality along the EastLink corridor, including near the sites for the tunnels, is generally good.

## CITYLINK TUNNELS

Melbourne has an existing set of road tunnels (CityLink). Extensive monitoring before and after the tunnels opening was performed in suburbs near the CityLink tunnels (Southbank, Burnley and Richmond) and within the CityLink tunnel stacks. This monitoring did not detect an impact of emissions of the tunnels on local air quality (see EPA Publication 958, *CityLink – Review of air quality monitoring*).

## FUTURE

In order to obtain a licence to operate, EastLink must demonstrate that the tunnel design will meet environmental objectives. The information summarised in this bulletin will assist EPA in assessing the tunnel design.

Further air quality monitoring will be conducted when EastLink is operational to confirm that air quality objectives continue to be met.

## FURTHER READING

Related publications are available through the EPA web site, [www.epa.vic.gov.au](http://www.epa.vic.gov.au).

*CityLink – Review of air quality monitoring*, EPA Publication 958, September 2004

*Review of air quality near EastLink*, EPA Publication 1006, August 2005.

*Review of air quality near open roads*, to be published by EPA.

*Victoria's air quality – 2004*, EPA Publication 1000, June 2005.