# Air quality monitoring stations

# Fact sheet

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We install ambient air quality monitoring stations to help us identify potential air quality impacts of a proposed motorway project. A project will not be approved until potential air quality impacts have been rigorously assessed.

This fact sheet provides information on air quality monitoring around tunnels. For details about monitoring ventilation outlets and in-tunnel monitoring, please refer to the tunnel ventilation and filtration fact sheet.

#### Project approval process

Department of Planning and Environment (DPE) will consider all information in the Environmental Impact Statement (EIS) for the project and issues raised in submissions. It is also reviewed by NSW Health, the NSW Environment Protection Authority (EPA), other relevant agencies and expert technical peer reviewers. The NSW Chief Scientist and Engineer also commissions international experts to review the air quality assessment.

As part of stronger measures introduced by the NSW Government in 2018, additional checks are required as part of the EIS process. They involve:

- The Advisory Committee on Tunnel Air Quality's scientific review of the project's air emissions from ventilation facilities
- The NSW Chief Health Officer's statement on the potential health impacts of emissions from tunnel ventilation facilities.

We are required to respond to issues raised by agencies and the public before DPE makes a recommendation to the Minister for Planning and Public Spaces on whether to approve the project.

DPE's provides a recommendation in a detailed Secretary's Environmental Assessment Report, which includes advice from other agencies and peer reviewers.

This report details whether the potential impacts of the project have been appropriately mitigated, and includes draft approval conditions for the Minister for Planning and Public Spaces' consideration. The Minister then decides whether to approve the project and with what conditions.

### Conditions of approval

The Conditions of Approval (CoA) for tunnel projects require ambient air quality monitoring for a period of 12



months before operation and 24 months after opening. This monitoring is aimed at detecting potential air quality impacts from tunnel ventilation outlets. As part of the CoA all tunnel projects must publish their air quality reports.

#### Air Quality Community Consultative Committee

As part of our projects, Transport also ensures an Air Quality Community Consultative Committee (AQCCC) is set up in the early stages of the project. The purpose of AQCCC is to actively engage and represent the local community in matters relating to air quality. Committee members evaluate air quality reports, provide input on air quality complaints, and distribute important monitoring results during the consultation process. They also provide advice on the strategic placement of air quality monitoring locations. The committee's inputs and feedback help ensure that community interests are effectively integrated during all stages, from the design and construction to the operation of the tunnel.

#### What do they do

Air quality monitoring stations measure concentrations of air pollutants such as carbon monoxide and nitrogen dioxide, as well as ozone and particulate matter within the air. They also monitor weather conditions, including temperature, wind direction and wind speed.

Monitoring operates 24 hours a day, seven days a week and must meet strict operational requirements set out in Australian Standards. We have personnel visit the stations twice a month to test and calibrate the equipment and ensure the data they collect is accurate.

#### Location

The location of the monitoring occurs in consultation with the AQCCC. The AQCCC includes council and community members, as well as independent air quality experts. The location of an air quality monitoring station does not mean that's where a project or ventilation system will be. The monitoring station is generally somewhere within or near the proposed project corridor.



## What happens with the data

The data collected is used to prepare an air quality assessment for the proposed project's EIS. This step helps show the project will comply with all of the EPA and the DPE requirements.

An EIS identifies potential environmental and social impacts of a project such as noise, traffic, dust, visual amenity, air quality and community impacts during its construction and when in use. Measures are then proposed to minimise these impacts. The EIS is publicly exhibited so community members can make

submissions on all aspects of the project, including air quality.







Data collation for reporting

# Further reading

Approved methods for the sampling and analysing air emissions in NSW