

ACTAQ Endorsed Scope of Works

Scope of work - Review of Health Effects of Traffic-Related Air Pollution

Provide a commentary on the current evidence for the health effects of traffic-related air pollution and any implications regarding the findings of Environmental Impact Statements for recent motorway tunnel projects. A review of the primary literature is not required. The review will include a desktop review to identify relevant recent (last ten years) reviews and meta-analysis.

The review will include, but not be limited to, consideration of the following:

- The Advisory Committee on Tunnel Air Quality Technical papers and Initial Report on Tunnel Air Quality
- The Environmental Impact Statements and related technical reviews for NorthConnex, M4East, M4-M5 Link, new M5, M6 Stage 1 and Western Harbour Tunnel
- Health impacts associated with traffic emissions in Australia. Expert Position Statement by The University of Melbourne
- HEI Panel on the Health Effects of Long-Term Exposure to Traffic-Related Air Pollution. 2022. Systematic Review and Meta-analysis of Selected Health Effects of Long-Term Exposure to Traffic-Related Air Pollution

Scope of work - Review of Air Quality Monitoring Data

Analyse all available NSW ambient and tunnel stack data (provided by Transport for NSW) to determine the potential for a measurable impact on ambient air quality and if any impact from stack emissions was discernible in the ambient monitoring data.

The analysis will include:

- Statistical analysis of the QA/QC'd ambient monitoring data to determine key properties, differences between sites and identify common/unusual features.
- Estimate the potential to detect a potential "signal" from the relevant stack sources in the ambient monitoring data.
- Comparison of this "signal" with stack impact modelled in EISs for the relevant tunnel projects.

The findings will be provided in a report that will, as far as possible, be readily understood by an educated public.

Scope of work - Review of Air Quality Monitoring Data – Peer Review

Provide a peer review of the Review of Air Quality Monitoring Data report.

Scope of work - Cost and Effectiveness of Filtration

Provide an update to the report *State of World Practice Urban Motorway Tunnel Filtration 2018* with a focus on the effectiveness and relative costs of tunnel filtration and air treatment systems for removing particles, nitrogen dioxides and other pollutants from air emitted from tunnel ventilation outlets.