

10 September 2014

Director - Infrastructure Projects
 Department of Planning and Environment
 Number: SSI 13_6136
 Major Projects Assessment
 GPO Box 39
 SYDNEY NSW 2001

Via online form: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6136

NorthConnex Application Number: SSI 13_6136

Submission in response to the exhibition of the EIS for NorthConnex.

I **object** to the project as described in the EIS.

I am extremely concerned about the following issues and request these be considered by NorthConnex Project Team and the Department of Planning:

1. Unsolicited proposals may not be in the public interest

In their unsolicited proposal the good people at Transurban Ltd are doing what they are paid and expected to do i.e. further Transurban's interests. These are not necessarily those of tunnel users, or the local residents.

My concern is that the tunnel will divert substantial public resources and delay for many decades a motorway using the western (Type C) corridor which was contemplated as the ultimate M1 – M7 solution by the Pearlman Report in 2007.

It is evident that the M2 was under specified and despite recent widening resembles a parking lot at peak periods. It's only 17 years old. Under no circumstances should lane(s) on the existing Pennant Hills roadway be removed as happened to Epping Road at Lane Cove.

2. Filtration of emissions

I am concerned that despite scientific studies demonstrating extremely serious impacts of vehicle generated air pollutants on health, emission filtration was dismissed in the EIS as being not cost effective or warranted.

Health impacts include prothrombotic and inflammation effects which cause, for example, increased deaths from heart disease, increased risk of lung cancer, stroke and asthma.

There is a long established principle in common law that the party introducing a hazard onto land is responsible for containing that hazard. There is an obvious moral imperative to do so. Whatever may have happened with tunnels in the past, given the present state of knowledge there can be no excuse for creating, then not properly treating, this hazard.

3. Design and placement of southern ventilation stack

The EIS says that placement of the southern ventilation stack is based on, amongst other things, the need to avoid property acquisition.

The objective approach would be to determine the height and location of the stack solely based on sound engineering and scientific principles, using relevant, local parameters. Then, if it's necessary, acquire some land.

In the absence of filtration, ineffective dispersion will bring local residents into contact with high levels of vehicle emissions they are not now exposed to. This is totally unacceptable, and given Australian experience with tunnel ventilation and overseas experience with filtration, totally avoidable and without excuse.

4. Ultrafine particulates and proliferation of diesel vehicles

Diesel emissions have been classified as carcinogenic by the World Health Organisation, and contain a larger number of ultrafine particles which penetrate deep into lung tissue causing inflammation, and may cross into the bloodstream.

Whilst electric / hybrid propulsion for light vehicles may become more cost effective over time, heavy transport will rely upon diesel fuel for foreseeable decades.

Diesel trucks are long lived and many old technology trucks in relatively poor condition are used to deliver in the metropolitan area and on short hauls like Newcastle or the central coast, so will be using the NorthConnex tunnel.

It is acknowledged in the EIS that diesel cars are increasingly popular, however there is no attempt to estimate the impact long term of this trend to purchase an increasing proportion of diesel powered cars and 4WDs on the particulate mix.

Without proper filtration it's probable increasing volumes of carcinogenic ultrafine particles from diesel will be emitted from the tunnel for decades into the future.

5. Concern for the health of regular tunnel users

The EIS shows air quality within the tunnel as not meeting standards for pollutants such as NO₂, with a haze of particulate matter at the ends of the tunnel. Given the tunnel's length regular users will be exposed to this foul mix for much longer periods than elsewhere in Sydney, with increased health risks.

6. Problematic air quality modelling

There are apparent flaws in the air quality modelling of in the EIS which include:

- a) reliance on meteorological data from weather stations which do not reflect the local meteorology, local topography, and the valley locations;
- b) the use of a coarse topographical model;
- c) the background air quality being based on air quality at Lindfield and Prospect, and the lack of any actual data on PM_{2.5}

NorthConnex EIS Submission

To address these concerns I respectfully request the following:

1. The air quality and human health impact assessment be revised to address the issues raised.
2. A Life Cycle Analysis be undertaken and assessment for the provision of filtration of tunnel emissions.
3. A long term health study on children and residents in areas impacted by stack emissions be included as part of the conditions of approval.
4. A comprehensive air quality monitoring program is developed and implemented ongoing for the life of the tunnel.
5. An independent review of the ventilation system be undertaken to verify that there will not be no portal emissions.
6. The Department of Planning and Environment does not approve this project unless and until it is modified to meet the reasonable, public interest requirement to not emit known carcinogens.