Director - Infrastructure Projects

Department of Planning and Environment Number SSI 13 6136 Major Projects Assessment GPO BOX 39 SYDNEY NSW 2001 7th September 2014



NorthConnex Application Number SSI 13 6136

Please find my submission below in response to the exhibition of the EIS for NorthConnex.

Firstly I would like to state that I object to the project as described in the EIS

I have a high level of concern regarding the following issues and request that these be considered by NorthConnex and the Department of Planning. In regard to the NorthConnex Tunnel I am concerned about:

Placement of both ventilation stacks in densely populated residential areas at West Pennant Hills and Wahroonga. Families, schools, aged care facilities and hospitals will be exposed to serious health risks from the emissions from these two stacks.

I am concerned about the research studies that suggest the impacts of air pollutants on health. These include increased death from heart disease, increased risks of lung cancer, stroke, poor lung growth in children, increase asthma, and recent research suggesting low birth weight for pregnant women, increased autism and congenital heart defects. These studies confirm air pollutants have prothrombotic and inflammatory effects on humans.

I request that the following actions are undertaken.

Due to the significant health concerns of the current project design, I request the department of planning does not approve the project in its current form.

Extensive modeling of wind trials be undertaken in the two areas where the stacks are being proposed. Current data shows modeling from areas long distances from Pennant Hills Road which is not relevant at all.

Research into the Plume Flow from towers, no matter what height, need to be done. Plumes do not disperse quickly into a vertical direction as is suggested. They can drop to ground level quickly and stay in concentrated form for long distances. Inversion layers also keep these pollutants at ground level for long periods of time. Planners for the NorthConnex assume that wind will disperse the emissions, but there are many, many days of very still weather, therefore no dispersion.

The emission stacks MUST BE FILTERED.

Japan has many tunnels which are filtered, I believe delegations from Australia went to Japan and studied their air emissions. These have not been implemented in the Lane Cove Tunnel or the M5. The M5 filtering is badly flawed because it was implemented AFTER being built. This must not happen again.

Department of Planning Received 9 SEP 2014 Scanning Room

- WHO classifies diesel exhaust fumes as a *carcinogen (cancer causing),* belonging in the
- "same deadly category as asbestos, arsenic and mustard gas"
- *Ultrafine particles* (median diameter <0.1 micrometers) are more toxic when inhaled than
- other measurable particles. They are greatly absorbed into tissues and the circulation and
- are important factors in determining *cardiopulmonary toxicity*.

Cost is the only reason that these emission stacks are not being filtered. This is short sighted on behalf of the Department of Planning and Environment. Looking after the Australian population should be the number one priority. It will pay off with the health of the nation as hospital and medical costs associated with an unfiltered tunnel will increase.

This is a very long tunnel. Emissions will be huge. Filter them.

yours faithfully

Ausen Roach.

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