

8 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

My name is Toni Chard, 16A Bareena Avenue Wahroonga. My home is 300 metres from the proposed stack and northern portal for the 9km tunnel.

I have 2 children who attended two of the local schools.

I am a Registered Nurse married to a Cardiothoracic Surgeon and have worked as his Practice Manager for 23 years. I am involved with the risks for heart and lung disease.

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

Firstly I would like to state 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 regards to the NorthConnex tunnel, I am concerned about:

1. Placement of the northern ventilation stack in the centre of a densely populated residential area in Wahroonga, where 9,300 school children will be exposed, as well as multiple aged care facilities, hospitals, businesses and homes.
2. The placement of the northern ventilation stack in a valley in Wahroonga where there are often low wind speeds, which will result in poor dispersion and exposure to community to high levels of tunnel emission.
3. I am highly concerned about the multiple large scale research studies that suggest the impacts of air pollutants on health are serious. These include increased death from heart disease, increased risks of lung cancer, stroke, poor lung growth in children, increased 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 which cause the above health problems.
4. I am concerned about the project including future provisions for portal emissions in densely populated areas, which will result in emissions remaining at ground level, and hence exposing the local population to pollutants.

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5. I am also concerned that NorthConnex's claim that there will be no portal emissions from current proposal cannot be verified.
6. I am concerned about the large amount of diesel emissions which will be emitted from the NorthConnex tunnel, as it is being designed for heavy freight to bypass Pennant Hills Road. Diesel emissions have been classified as carcinogenic by the World Health Organisation, and also contain a larger number of fine particles which penetrate deep into lung tissue and remain there causing inflammation.
7. I am concerned about the air quality within the tunnel which is shown in the EIS to have exceedences above standards for pollutants such as NO₂, and haze from particulate matter at the ends of the tunnel. Lengthy delays in the tunnel will increase human exposure to identified cancer causing emissions. Holiday traffic, long weekends and accidents all will cause longer times inside the tunnel.
8. I am concerned about the multiple flaws in the air quality modelling of the northern stack in the EIS. These include:
 - a) extrapolation of meteorological data from other weather stations which do not reflect the local meteorology, local topography, and the valley location.
 - b) The use of a coarse topographical model
 - c) The failure to consider polluted intake air from the Pennant Hills/M2 interchange as part of the project contribution to air quality at Wahroonga
 - d) the background air quality being based on air quality at Lindfield and Prospect and the lack of any actual data on PM_{2.5}
9. I am concerned that a full and transparent options assessment process was not undertaken to assess alternative designs for the project. Unlike other tunnel projects in Sydney there are alternatives for locating the stack and portals in non-residential areas.
10. I am concerned about the safety for travellers inside the tunnel. There will be adverse events inside the tunnel and some of these will be catastrophic. It is not a matter of if but a matter of when. It will be impossible to police trucks carrying dangerous goods and in some cases the truck driver may be unaware of the potential danger of the goods being carried.
11. I am concerned that the justification for not providing filtration for the stacks is cursory and unconvincing.

The EIS fails the common sense rule. It states that there will be no emissions from either portals. This is grossly misleading. In its current form the proposed 9km tunnel does not meet world standard for placement of ventilation stacks, that is, the recommendation is to place ventilation stacks as far as possible away from residential areas.

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To address my concerns I request that the following actions are undertaken:

1. The air quality and human health impact assessment need to be revised to address the issues raised above.
2. An independent options assessment process should be undertaken to assess alternative locations for the ventilation stack and portals.
3. To undertake a Life Cycle Analysis and assessment for the provision of filtration
4. A long term health study on children and residents in areas impacted by stack discharges be included as part of the conditions of approval.
5. A comprehensive air quality monitoring program is developed and implemented.
6. An independent review of the ventilation system is undertaken to ensure that NorthConnex's claim of no portal emissions is justified.
7. Portal emissions from NorthConnex in the future are banned.
8. The Submissions Report/Preferred Project be exhibited to allow the community to respond to the revised information contained in the report.
9. The Department does not approve the project in its current form as it clearly does not meet the principles of Ecologically Sustainable Development as required by the Environmental Planning and Assessment Act.

Finally, no attempts have been made to alleviate traffic congestion on Pennant Hills Road for many years such as

- restricting trucks to travelling between the hours of 10pm to 6am or at least outside of the busy peak periods
- Restricting large trucks from passing each other and travelling in multiple lanes (large trucks frequently block the road with this action)
- the reduction of crossroads. Pennant Hills Road is a major thoroughfare road and should be treated as a highway road. Reducing the number of access roads would eliminate the need for so many traffic lights and maintain traffic flow. Motorists would soon learn which roads can access Pennant Hills Road and would only take them out of their way for 500 metres or so to get to the next crossing. A few well placed overpasses or underpasses would help.

The number one priority for the ventilation design for a 9km tunnel is the health and safety of the commuters and the surrounding community. There is no place for guess work or assumptions.

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