

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](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6136)

**NorthConnex Application Number: SSI 13\_6136**

Please find below my submission responding to the exhibition of the EIS for NorthConnex. I **strongly object** to the project as described in the EIS.

My husband and I bought our home in [REDACTED] Wahroonga about 14 years ago thinking it was a wonderful "healthy" location to bring up children due to its proximity to beautiful parks and playing fields and wonderful schools. We thought that the air was clean compared to the city where we previously lived.

I have 8 years of university study related to health. I hold a Diploma of Applied Science (Nursing), a Bachelor of Health Science with Distinction and a Master of Public Health. I am a Registered Nurse with a specialisation in cardiothoracic (heart and lung) area and acute care. I have over 20 years of experience in the health sector including the clinical and administrative sides at the local, state and national levels. I have over 8 years of experience working at the peak cancer organisation in NSW; the NSW Cancer Council which includes the senior role in managing a cancer information and support service. **I am very concerned about the possible and likely negative health effects of the NorthConnex Project in its current form, as described in the EIS.** I am concerned about the following issues:-

1. The placement of the northern ventilation stack in a densely populated residential area in Wahroonga, where there are over 9,000 school children to be exposed, as well as many childcare centres, aged care facilities, hospitals (Hornsby Hospital, Neringah Hospital and the Sydney Adventist Hospital), homes and shops.
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. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] I am concerned that [REDACTED]  
[REDACTED] bronchitis and asthma will be exacerbated with the northern ventilation stack being approximately 600 metres from our home and [REDACTED] school being approximately 850 metres away from the northern ventilation stack. Children spend a lot of time playing outside and exercising. I do not want my children being exposed to polluted air which can affect their growing lungs and expose them to many other health risks. Asthma is a life threatening disease [REDACTED]  
[REDACTED].  
During an acute attack of asthma [REDACTED], I would feel uncomfortable and concerned about exposing [REDACTED] to [REDACTED] local hospital, Hornsby Hospital, which is approximately 890 metres away from the northern ventilation stack.
4. My strong educational background and work experience in health including epidemiology, research, the cardiothoracic area and cancer make me concerned about the large scale studies that show increased asthma, increased risk of lung cancer, poor lung growth in children, increased death from heart disease, stroke and recent research suggesting low birth weight for pregnant women, increased autism, and congenital heart defect as a result of air pollution causing inflammatory and prothrombotic effects.
5. 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 high levels of pollutants. I am also concerned that NorthConnex's claim that there will no portal emissions from current proposal cannot be verified.
6. 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 Rd. 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. The air quality within the tunnel. The EIS shows that it has exceedances above standards for air pollutants such as NO2. I am also concerned about the haze from particulate matter that it will cause at the ends of the tunnel.

8. There are many 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<sub>2.5</sub>.
9. I am concerned that there was not a transparent and thorough assessment process 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 that there is not an acceptable filtration system provided for in the stack and tunnel and that there has not been an acceptable reason given for not providing this.

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.

[REDACTED]

[REDACTED]

[REDACTED]