

7<sup>th</sup> September 2014

Director – Infrastructure Projects  
 Department of Planning and Environment  
 Number: SSI 13\_6236  
 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 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 am a long time resident of Bareena Avenue in Wahroonga and have very deep concerns with this project in a number of areas. I request that these be considered by NorthConnex and the Department of Planning.

**1. The Placement of the Ventilation Stack**

- In the centre of a densely populated housing area which includes numerous schools, aged care facilities, pre-schools and a hospital.
- Topography of the area. The current placement of the stack is in a valley which according to studies will create an inversion effect, trapping the pollutants at ground level directly into the populated areas. Modeling using wind velocity readings from Terry Hills and Sydney Airport has apparently been done, but as a resident in Bareena Avenue I can assure you we have very little wind.

**2. Air quality from the Ventilation Stack and Portal Emissions**

- Multiple large scale studies suggest that the impacts from air pollutants on health are serious. Particularly for young children who by the very nature of being a child, spend more time playing outside and therefore more exposed to the pollutants.
- Modern trucks are mainly diesel powered. I am concerned with the estimated 5000 trucks per day using the tunnel (and this is the starting number) there will be diesel emissions coming not only from the stack, but from the portals, and these emissions are particularly deadly. They have been classified by the World Health Organisation as carcinogenic, containing many more fine particles

which can penetrate deeper into the lungs and blood stream, causing cancer and lung disease.

**3. Numerous flaws in the EIS Modeling for the Northern Stack and lack of consultation.**

- Modeling not done using local weather conditions – what happens when the wind doesn't blow which is most of the time.
- Terrain surrounding stack – temperature inversion effect.
- Height of stack. Inefficient to achieve emissions dispersion.
- Tunnel temperature – cool air is not as buoyant as warm air.

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

1. The Department does not approve the project in its current form, without addressing my concerns above.
2. An independent review should be carried out to determine an alternative location for the portals and stack.
3. An independent review of the ventilation system is undertaken to ensure NorthConnex's claim of no portal emissions is justified.
4. Alternative options should be considered, like extending the tunnel north thereby moving the stack to an industrial area, or looking at an above ground alternative route by-passing populated areas.

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