Director - Infrastructure Projects
Department of Planning and Environment
Major Projects Assessment
GPO Box 39
SYDNEY NSW 2001

9 September 2014

RE: NorthConnex Application Number: SSI 13_6136

Dear Madam/Sir

As a scientist, parent of school children in the upper North Shore area, and concerned citizen, please find below my submission in response to the EIS for NorthConnex which raises several significant and worrying issues regarding the project.

- 1. The placement of the northern ventilation stack in the centre of a densely populated residential area in Wahroonga, in the vicinity of 9,300 school children(including my own) as well as multiple aged care facilities, hospitals, businesses and homes is unacceptable.
- 2. Given the proposed location of the ventilation stack, there appears to be inadequate justification for not providing filtration. The location of the stack, and the concomitant low wind speeds typical of the area, will result in poor dispersion of exhaust and exposure of the community to high levels of toxic emissions. It is essential to undertake an independent assessment for the provision of filtration and to ensure that NorthConnex's claim of no portal emissions is justified
- 3. A number of large scale research studies suggest adverse health effects of air pollutants. These include contributing to increased risk of heart disease, lung cancer, stroke and asthma; possibility of low birth weight for pregnant women; and increased autism, congenital heart defects and poor lung growth in children. A significant component of the pollutants will be diesel emissions due to the planned usage of the tunnel by heavy freight as the tunnel provides the means of bypassing Pennant Hills Road. Diesel emissions have been classified as carcinogenic by the World Health Organisation. Air quality in the vicinity of the stacks, and assessment of the impact of emissions human health, need to be reexamined. Further, a comprehensive air quality monitoring program needs to be developed and implemented.
- **4.** Given the above concerns regarding exhaust emissions, it is also disturbing that the project includes future provisions for portal emissions in densely populated areas which will result in additional emissions remaining at ground level, and hence exposing the local population to even higher concentrations of pollutants.

Furthermore, the air quality within the tunnel is shown in the EIS to have levels of particulate matter and pollutants, such as NO_2 , above acceptable standards. The community needs confirmation from NorthConnex that there will no portal emissions from the current proposal.

- 5. There are issues regarding the air quality modelling of the northern stack in the EIS including extrapolation of meteorological data from other weather stations which do not represent local weather patterns and topography. There is also failure to consider polluted intake air from the Pennant Hills/M2 interchange as part of the project contribution to air quality at Wahroonga. As well, the background air quality is based on data obtained at Lindfield and Prospect and not local data.
- 6. Of great concern is that there was not a comprehensive and transparent process to assess alternative designs or options for the project. An independent options assessment process should be undertaken to assess alternative locations for the ventilation stack and potential portals. A Submissions Report/Preferred Project needs to be publicly exhibited with adequate time for the business and residential communities to respond to the revised information.

Sincerely