



FRIENDS OF  
 KU-RING-GAI  
 ENVIRONMENT INC.

Director - Infrastructure Projects  
 Department of Planning and Environment  
 Number: SSI 13\_6136  
 Major Projects Assessment  
 GPO Box 39  
 SYDNEY NSW 2001

11 September 2014

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)

**RE: NorthConnex Application Number: SSI 13 6136**

Dear Sir/Madam

We would like to state at the outset, on the evidence a number of professional experts have put forward in criticism of the EIS, we strongly object to the NorthConnex project.

We understand the proposed ventilation stack will emit unfiltered exhaust fumes from approximately 5000 diesel trucks and 9000 cars per day into a residential area that has a high density of schools, aged care facilities, hospitals and residences.

We have read the *Letter of Medical Evidence opposing the NorthConnex Tunnel Portal and Stack Placement in Residential Suburb* by Dr Raymond Nassar and Professor Simon Finfer. We endorse and support their submission in response to the North Connex EIS.

We have also read Ku-ring-gai Council's submission in response to the EIS and endorse its report, criticisms and recommendations with respect to, *the number of stacks compared to the Lane Cove Tunnel; the location of the Wahroonga stack in an industrial area; consideration of extending the tunnel; the height of stacks; the background air stations and atmospheric conditions; the air quality assessment and ongoing monitoring; construction issues; design issues; ecology impacts; heritage impacts; noise impacts; traffic issues and vibration impacts; issues with which we are unqualified to make a proper assessments.*

We would also put forward our comments and objections to the NorthConnex EIS as follows:

1. We believe the positioning of the northern ventilation stack in the heart of a densely populated residential area in Wahroonga is in appropriate location and a real health risk to the surrounding population. We understand approximately 9,300 school children will be potentially exposed to pollutant fallout emitted from the stack, as well as people in multiple aged care facilities, hospitals, businesses and homes within 1500 metres of the ventilation stack.

The Wahroonga ventilation stack should be relocated out of the residential area into an industrial area.

2. We understand the placement of the northern ventilation stack in a valley in Wahroonga where there are often low wind speeds may result in poor dispersion and exposure to the community to high levels of tunnel emission.
3. We are concerned after attending a local forum on the health impacts and listening to Associate Professor Chard and other health professionals, of learning about medical research studies that suggest the exposure to and impacts of air pollutants on health are serious, particularly on the young and people with existing health conditions. We understand 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. According to international air pollution experts we understand there is no safety threshold to the amount of air pollution causing health impacts and that there is no “safe level”.
4. We are particularly 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. We are also concerned that NorthConnex’s claim that there will no portal emissions from current proposal cannot be verified.
5. We are 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 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. We believe the incoming air must also be
6. We are concerned about the air quality within the tunnel which is shown in the EIS to have exceedences above standards for pollutants such as NO<sub>2</sub>, and haze from particulate matter at the ends of the tunnel.
7. We believe there may be 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<sub>2.5</sub>
8. We are 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.

9. We believe the justification for not providing filtration for the stacks is cursory and unconvincing.

To address our membership's and general community's concerns we 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.
10. To address the issues raised in the Ku-ring-gai Council submission relating to both construction and post construction operations. Council states it requires "a draft copy of proposed conditions of consent for review and comment prior to the release of any approval." Council's main areas of concern are:
  - Construction traffic
  - Impact on residential properties during construction and post construction
  - Monitoring of pollution from ventilation stacks
  - Treatment of ecological communities e.g. the threatened and endangered Blue Gum High Forest ecological community
  - Traffic noise and height of noise walls
  - Visual impact of ventilations stacks
  - Location of ventilation stacks

We are grateful to the CAPS organization for the helpful material they have provided to the community for the preparation of submissions.

We thank you for the opportunity for making a submission to the NorthConnex EIS. We hope the Minister will take our submission into account and make substantial changes to the NorthConnex project in the public interest.

Yours faithfully

Kathy Cowley  
PRESIDENT