Mr & Mrs P Hammond 18 Grosvenor Street WAHROONGA NSW 2076

9 September 2014

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

Re: NorthConnex Application Number: SSI 13_6136

Dear Sir or Madam,

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

Firstly we would like to state that we strongly object to the project as described in the EIS.

We are a family with two small children, aged 4 and 6, living in a Heritage Conservation Area approximately 600m from the proposed northern emissions stack. By the time NorthConnex is built, both of our children will be attending the local primary school, only 1200m from the ventilation, so will be spending virtually 100% of their lives in the immediate vicinity of the proposed tunnel exhaust.

We are extremely concerned about the following issues and request that they be considered by NorthConnex and the Department of Planning:

- Placement of the northern ventilation stack in the centre of a densely populated residential area, where education is the main industry, together with multiple hospitals and aged care facilities, is totally unacceptable and inconsistent with international recommendations. Alternative scenarios exist but appear not to have been adequately considered.
- 2. Multiple large scale research studies suggest that there are serious adverse health impacts of air pollutants, particularly those from combustion of diesel fuels. In particular, we are concerned about increased risk of poor lung growth and increased asthma in children. One of our children suffers from allergies and is already at increased risk of asthma, so we cannot accept any avoidable exacerbation of that risk.
- 3. Diesel emissions have been classified as carcinogenic by the World Health Organisation, and they also contain a large number of fine particles which penetrate deep into lung tissue. The proposal to concentrate all exhausts from a 9km tunnel promoted as a heavy freight bypass route via just two ventilation shafts must expose the proponents and authorising agency/s to future liability if rates of related diseases increase in future.
- 4. Measurement of fine particulate matter of 2.5 microns or less in diameter (PM2.5) is considered to be the best indicator of the level of health risks from air pollution, yet

the current NorthConnex proposal is based on estimates (not actual measurements) of PM2.5 from monitoring stations in other parts of Sydney. There is also no proposal to carry out monitoring of PM2.5 before, during or after the construction or operation of the tunnel.

- 5. The modelling of air quality impacts appears to have been affected by a number of flaws in the assumptions used. In particular, the coarse topographical model, and the lack of local air movement data seems to have given insufficient consideration to the fact that the proposed location of the emission outlet is in a sheltered valley with reduced air movement. A valley in a residential area is no place for an unfiltered tunnel ventilation stack!
- 6. The prospect of installing filtration to the emissions has been inadequately dealt with and has been compared to local examples where filtration was attempted to be applied retrospectively (M5) at great expense and with unsatisfactory effect. We understand that air filtration systems are most economical and effective when designed and installed at the time of construction.

To address our concerns, we strongly propose the following actions:

- 1. The air quality and human health impact assessment need to be revised to address the issues raised above.
- 2. An independent assessment should be undertaken to evaluate alternative locations for the ventilation stack and portals. In particular, relocation of the ventilation stack to higher ground, preferably in an industrial or unpopulated area should be a priority.
- 3. Comprehensive air quality monitoring (including of PM2.5) at significant sites (eg schools, high-rise units, Wahroonga Village) in the vicinity of the ventilation stack must be undertaken prior to the commencement of construction and for at least 5 years after completion.
- 4. The installation of world-class filtration systems at the time of construction should be a requirement of approval.
- 5. The Department of Planning should 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.

Thank you for the opportunity to comment on the NorthConnex EIS. Your response to our concerns is appreciated.

Yours sincerely,

Robyn & Paul Hammond 18 Grosvenor St Wahroonga NSW 2076