9 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=61_36

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 I <u>object</u> to the project as described in the EIS. I am a resident in Bareena Ave and live less than 600m from the proposed Stack. I have two children who spend a lot of time outside playing tennis and soccer and who also attend Barker College. They will be affected by the pollution from the stack whilst at their home and School.

In regards to the NorthConnex tunnel, I am concerned about:

- 1. I am extremely angry that you would consider any proposal that puts the health of the community and the tunnel users at such risk. The stack needs to be filtered. This should be your top priority. You can not ignore the Medical research and concerns from the Medical and Scientific community about the dangers of ultra fine particulate matter on community health.
- 2. The placement of the northern ventilation stack, in a valley in Wahroonga, needs to be reconsidered and moved out of a residential area. There is often no wind in Wahroonga, and therefore very poor dispersion of the plume of pollution that will come from the stack. The wind dispersion modeling in the EIS is fundamentally flawed. They used data from weather stations in Terry Hills that is clearly very different from Wahroonga.
- 3. I am very concerned about the negative impact on the health of the 9 300 school children in the area who will be inhaling these carcinogenic fumes on a daily basis.
- 4. I am also concerned that NorthConnex's claim that there will be no portal emissions from the current proposal cannot be verified.
- 5. I am 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.

NorthConnex EIS Submission

- 6. I am concerned about the air quality within the tunnel which is shown in the EIS to have exceedences above standards for pollutants such as NO2, and haze from particulate matter at the ends of the tunnel.
- 7. I am concerned about the 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_{2.5}
- 8. I am concerned that NorthConnex has not provided alternative design options for the project. Unlike other tunnel projects in Sydney there are alternatives for locating the stack and portals in non-residential areas.
- 9. I am concerned that the justification for not providing filtration for the stacks is cursory and unconvincing.

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 design a ventilation and filtration system for the tunnel and stack, that uses Best Practice, technology that is used in both Norway and Japan..These countries are leaders in the field. They use Electrostatic Precipitators in conjunction with N02 denitrification equipment to remove suspended particles (PM1, PM2.5, PM10) and N02 from the air.
- 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.

