

8 September 2014

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

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 **object** to the project as described in the EIS.

I live 500 meters away from the proposed northern ventilation stack. I have a high level of concern regarding the following issues and request that these be considered by NorthConnex and the Department of Planning.

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

1. The placement of the northern ventilation stack in a valley in Wahroonga where there are often *low wind speeds*, which will result in poor dispersion and exposure to community to high levels of tunnel emission, also it is in the centre of a densely populated residential area in Wahroonga, where *9,300 school children* will be exposed, as well as multiple aged care facilities, hospitals, businesses and homes.
2. I am 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. The project for the amount of budgeted approx. \$3 billion has not been properly planned and consulted with locals which gives me the impression of rushing through the project.
3. I am highly concerned about the multiple large scale research studies that suggest the *impacts of air pollutants on health are serious*. 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.
4. I am concerned about the large amount of diesel emissions which will be emitted from the 9 kilometer long NorthConnex tunnel, as it is the longest tunnel in Sydney and 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

5. I am concerned that *no independent air quality assessment* is taken and 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}
6. 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. An *independent* options assessment process should be undertaken to assess alternative locations for the ventilation stack and portals.
2. The *independent* air quality and human health impact assessment need to be taken to address the issues raised above.
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. The Submissions Report/Preferred Project be exhibited to allow the community to respond to the revised information contained in the report.
8. 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.

I believe that public health should always be the priority regardless of the cost and that there is no safe limits of exposure to air pollution substances.

Yours faithfully,



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