

11 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=6136

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 have lived in Coonanbarra Road, Wahroonga with my husband and two children since 1999. My home is located just over 100 metres from the proposed northern ventilation stack. I also work at a local pharmacy in East Wahroonga. I am very concerned about 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. Placement of the northern ventilation stack in the centre of a densely populated residential area in Wahroonga. Current best practice in public health and urban infrastructure management by global standards requires that ventilation stacks be located away from residential areas. Where this is not possible filtration should be used. The Northconnex project proposes an unfiltered stack in a densely populated residential area where 9300 school children will be exposed along with the residents of multiple aged care facilities, hospitals, businesses and homes.
2. The proposed placement of the northern ventilation stack is in a valley in Wahroonga which typically has stable air conditions. The height of the valley ridges will detract from the height of the stack. Both of these facts will contribute to particulate matter becoming 'trapped' which would lead to poor dispersion and expose the community to high levels of tunnel emissions. A valley is the least desirable location for a ventilation stack.
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 project including future provisions for portal emissions in densely populated areas. Portal emissions remain at ground level, which would in turn expose the local population to even more pollutants.
5. The World Health Organisation classifies diesel emissions as carcinogenic. These emissions contain a larger number of fine particles which can penetrate deep into lung tissue and cause inflammation. Therefore I am concerned about the large amount of diesel emissions from the 9km (northbound) NorthConnex tunnel that will be emitted in one single location, given the intention that the tunnel will be used by heavy freight vehicles
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 very concerned that there are multiple flaws in the air quality modelling of the northern stack in the EIS. These include:
 - a) Collection of meteorological data weather stations at Terry Hills and Sydney Airport which do not reflect the local meteorology, local topography, and the valley location.
 - b) The failure to consider polluted intake air from the Pennant Hills/M2 interchange as part of the project contribution to air quality at Wahroonga
 - c) The background air quality was based on air quality at Lindfield and Prospect. This data is NOT representative of the proposed stack site. The background monitoring of air quality data should be collected at the site of the stack to have any meaning when used in modelling scenarios.
8. 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.
9. I am concerned that the justification for not providing filtration for the stacks is based on cost, not human health.
10. I am concerned that although the EIS seeks to assure us that the change to air quality and therefore human health will be 'negligible' there does not appear to be any assurance of liability or responsibility should the worst fears of the local community be realised in the future.

To address my concerns I request that the following actions are undertaken:

1. 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.

An independent options assessment process should be undertaken to assess alternative locations for the ventilation stack and portals.

2. The air quality and human health impact assessment must be revised to accurately reflect the conditions at the site of the proposed stack and address the issues raised above. The current modelling accuracy cannot be relied upon given the degree of uncertainty in both the meteorological and air quality assumption. Therefore the precautionary principle must be applied.

3. An independent options assessment process should be undertaken to assess alternative locations for the ventilation stack and portals.

Comprehensively assess the benefits of providing filtration for the tunnel/stack.

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To comprehensively assess the benefits of providing filtration for the tunnel/stack.

Portal emissions from Northconnex tunnel in the future are prohibited and monitoring to be in place to confirm zero portal emissions.

5. Review alternative and more feasible solutions for Pennant Hills Road including an M9 orbital link which would improve traffic flows on both Pennant Hills Road and the Pacific Highway. This would achieve time benefits for freight and ensure health impacts are minimised ensuring cleaner air both on and off Pennant Hills Road.

Develop and implement a comprehensive independent air quality monitoring program.

6. To comprehensively assess the benefits of providing filtration for the tunnel/stack.

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7. 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.

The air quality and human health impact assessment must be revised to accurately reflect the conditions at the site of the proposed stack and address the issues raised above. The current modelling accuracy cannot be relied upon given the degree of uncertainty in both the meteorological and air quality assumptions. Therefore the precautionary principle must be applied.

8. The Submissions Report/Preferred Project be exhibited to allow the community to respond to the revised information contained in the report.
9. Comprehensively assess the benefits of providing filtration for the tunnel/stack.
10. The liability and responsibility for human health in all stages of the Northconnex project should be clearly identified.

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