

28 August 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 our submission in response to the exhibition of the EIS for NorthConnex.

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

We 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 proposed NorthConnex tunnel, I am **very concerned** in relation to the following points:

1. Placement of the northern ventilation stack 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. 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.
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, which will result in emissions remaining at ground level, and hence **exposing the local population to pollutants**. I am also concerned that NorthConnex's claim that there will no portal emissions from current proposal **cannot be verified as a justifiable fact**.

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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.

6. I am concerned about the air quality within the tunnel which is shown in the EIS to have exceeded 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:

- extrapolation of meteorological data from other weather stations which do not reflect the local meteorology, local topography, and the valley location.
- The use of a coarse topographical model.
- The failure to consider polluted intake air from the Pennant Hills/M2 interchange as part of the project contribution to air quality at Wahroonga.
- 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 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 cursory and unconvincing.

To address our concerns I request that the following actions be undertaken:

1. The air quality and human health impact assessment need to be revised to accurately address the issues raised above.
2. An independent options assessment process should be undertaken to assess alternative locations for the ventilation stack and portals, including the possibility of **moving to the industrial area with a low population density further away from the metropolitan areas.**

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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 **accurately 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.

I look forward to your favourable reply on this matter.

Yours sincerely,



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