

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

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. Placement of the northern ventilation stack and tunnel portals in the centre of a densely populated residential area in Wahroonga, where 9,300 school children will be exposed to exhaust emissions, in addition multiple aged care facilities, hospitals, businesses, homes and the recreation areas. In particular I note the proximity of the stack and portals to Wahroonga Preparatory School, KU Wahroonga Preschool, Next Generation Childcare, Abbotsleigh Junior School, and the children's play area at Wahroonga Park.
2. The placement of the northern ventilation stack portals in a valley in Wahroonga where there are often low wind speeds, which will result in poor dispersion and a resultant exposure to the local community to high levels of emissions.
3. 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. The fact that NorthConnex's claim that there will no portal emissions from the current proposal cannot be verified. I note that studies in respect of existing tunnels and ventilation facilities stress that portal emissions are a more concentrated source of pollutants than stack emissions. The claim that there will be no portal emissions is at odds with such studies.
5. 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. The air quality within the tunnel which is shown in the EIS to potentially exceed the standards for pollutants such as NO₂, and haze from particulate matter at the ends of the tunnel.
7. 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. 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. The justification for not providing filtration for the stacks is cursory and unconvincing. The use of a single example of filtering in the justification is statistically insignificant and the methodology is unscientific.

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 to assess alternative locations for the ventilation stack and portals;
3. 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. 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.

Evan Jones
26a Water Street
Wahroonga NSW
2076