

19 August 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 we **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:

- 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.
- I am concerned about the long term health impacts on my own family, living nearby to the stack means we will be constantly exposed to cancer-causing chemicals.
- 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.
- 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.
- 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.
- 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.
- 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.

- 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}
- 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.
- I am concerned that the justification for not providing filtration for the stacks is cursory and unconvincing. Two hundred doctors have already provided proof that fine particulate matter can and does cause lung cancer. Why is this being ignored?
- The public's health is being put at risk without any regard for the ramifications. Evidently, cost is more important than the health of the general public.
- The Air quality forum held at Barker College, organised by medical professionals, clearly highlighted the damage that can and will be caused to the population of the area.

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

- The stack must be moved to an appropriate location, away from residential areas and schools.
- The stack must be filtered to prevent the many health problems that **will** impact those in close proximity to it.
- Any and all future projects requiring ventilation stacks will be subject to stringent evaluation, and of course placed as far from residential areas as possible.
- If the stack is not moved, **and** filtered, the project must be cancelled entirely.

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