Department of Planning and Environment

Re: Northconnex M1-M2 Project - SSI 13_6136

As a family, we support the building of the Northconnex tunnel to reduce traffic on Pennant Hills Rd and to reduce travel time from the northern suburbs to southern suburbs of Sydney, however we have the following objections:

The location of the ventilation stack at Woonona Avenue, approximately 500 metres from my house. I have 3 children who attend the Wahroonga Public School and will reside in the area 24 hours a day. We have attended the Community meeting at Pennant Hills Golf Club and the Air Quality Forum at Hornsby RSL and are very concerned about the unfiltered air discharged from the ventilation stack. We understand that the science/modelling/assumptions concludes that there is a low risk of exposure to human health, however the logic of 9km of exhaust fumes from approximately 100,000 vehicles per day being exhausted through a ventilation stack 500 m from my house does not allow me to accept that there is low risk of impact to my kids health, when we will be exposed to the increase in vehicle emissions in our air over the long term. A research paper by Dr Gerda Kuschel ¹who spoke at the Air Quality Forum at Horsnby RSL stated that "the benefit of tunnel ventilation" stack, is that they can be directed away from residential areas and sensitive receptors. I cannot understand why Northconnex has chosen a residential area such as Bareena and Woonona avenue as a location for the ventilation stack. Dr Kuschel also stated in another research study² "that for every increase of five micrograms per cubic metre of PM_{2.5} (fine particles that are small enough to travel in the gas exchange between the lungs), the risk of lung cancer rose by 18%". The EIS reported an increase in the 24 hours $PM_{2.5}$ close to my house of 0.5 micrograms per cubic metre, which results in an increase of the risk of lung cancer to my family. 24 hour exposure is a short term assessment

¹ Ian Longley, Sally Gray, Gertrud Kuschel "Stocktake of air quality in and around State Highway tunnels", dated April 2010. ² Dr Ole Raaschou-Nielsen PhD a Corresponding AuthorEmail Address, Zorana J Andersen PhD a b, Rob Beelen PhD c, Evangelia Samoli PhD d, Massimo Stafoggia MSc e, Gudrun Weinmayr PhD f g, Prof Barbara Hoffmann MD g h, Paul Fischer MSc i, Mark J Nieuwenhuijsen PhD j, Prof Bert Brunekreef PhD c k, Wei W Xun MPH I, Prof Klea Katsouyanni PhD d, Konstantina Dimakopoulou MSc d, Johan Sommar MSc m, Prof Bertil Forsberg PhD m, Lars Modig PhD m, Anna Oudin PhD m, Bente Oftedal PhD n, Per E Schwarze PhD n, Prof Per Nafstad MD n o, Prof Ulf De Faire PhD p, Prof Nancy L Pedersen PhD q, Prof Claes-Göran Östenson PhD r, Laura Fratiglioni PhD s, Johanna Penell PhD p, Michal Korek MSc p, Prof Göran Pershagen PhD p, Kirsten T Eriksen PhD a, Mette Sørensen PhD a, Anne Tjønneland DMSc a, Thomas Ellermann PhD t, Marloes Eeftens MSc c, Prof Petra H Peeters PhD k, Kees Meliefste BSc c, Meng Wang MSc c, Bas Bueno-de-Mesquita PhD i, Prof Timothy J Key DPhil u, Kees de Hoogh PhD I, Hans Concin MD v, Gabriele Nagel PhD f v, Alice Vilier MSc w x y, Sara Grioni BSc z, Vittorio Krogh MD z, Ming-Yi Tsai PhD aa ab, Fulvio Ricceri PhD ac, Carlotta Sacerdote PhD ad, Claudia Galassi MD ad, Enrica Migliore MSc ad, Andrea Ranzi PhD ae, Giulia Cesaroni MSc e, Chiara Badaloni MSc e, Francesco Forastiere PhD e, Ibon Tamayo MSc af, Pilar Amiano MSc ag, Miren Dorronsoro MD ag, Prof Antonia Trichopoulou MD d ah, Christina Bamia PhD d, Prof Paolo Vineis MPH I †, Gerard Hoek PhD "Air pollution and lung cancer incidence in 17 European cohorts: prospective analyses from the European Study of Cohorts for Air Pollution Effects (ESCAPE)", in Lancet Oncology, dated July 2013

and Northconnex cannot provide an accurate assessment of long term affects and the long term risk to my family.

My children love to play in Carrington Park in Wahroonga, however I now understand that the rear of the park will be used as a truck depot and trucks/vehicles will travel between the site and the trucks compound. This will result in an increase in traffic noise to my family and a removal of a recreational facility only down the road from our house.

A solution to the Northconnex proposed infrastructure would be the relocation of the Ventilation Stack further down thenM1 to an industrial area.

Regards Declan Monahan