M&G KIRBY . 22 Billyard Ave. Wahroonga. 2076.

12 September 2014

Director – Infrastructure Projects.

Department of Planning and Environment

Number: SSI 13_6136

Major Projects Assessment

GPO Box 39

SYDNEY NSW 2001.

North Connex Application. Number SSI 13_ 6136

Please find below our objection to the project proceeding in our current form.

We agree that overall the tunnel will improve traffic flow by taking traffic from Pennant Hills road and streaming it through the tunnel, avoiding traffic lights and congestion in the suburbs on Pennant Hills road.

With the current situation the pollution from the traffic on Pennant Hills road Is spread over the total length of the road, from the M2 exit to the end of the F3, all areas along the road get a similar amount of motor vehicle pollution.

Under the two stack tunnel proposal we have 50% of the total vehicle exhaust pollution concentrated at two areas (Northern end , near where Edgeworth David crosses the F3 and the Southern end near where Pennant Hills road crosses the M2). This concentrates approximately five kilometres of vehicle exhaust at each point, it is not spread over a large area.

The northern end is in a depression in the topography and I doubt that a 23m high stack as proposed would result in the exhaust gases being distributed as suggested in some of the studies.

Items of particular note for the northern stack are

1/ As it is in a depression there will not be as much wind speed to disperse the pollution into the atmosphere as there would be if it was located in a more elevated position, and less populated area.

2/The stack is very close to the Hornsby & Ku- ring- gai Hospital (approximately 800 m)

From data available it seems there are approximately 9000 school children 2.2 km radius of the stack, plus numerous hospitals and aged care facilities, this should be considered in the planning.

In light of the facts, re Schools, Hospitals and retirement accommodation in, **Australia in 2014, shouldn't we build a road tunnel with exhaust stacks designed and built to world best practice?**

Australia is not a third world country and can afford to build to world best practice , plus by building and filtering to world best practice I feel there would be saving in future health care cost that would result from the cleaner atmosphere .

In Sydney we have the ongoing saga of the M5 tunnel , not properly ventilated and filtered when it was built, from what is said in the popular press there are still continuing issues with it.

There should be no consideration given to building the stacks and retro fitting filtration at a later date, this is not an option as that would be the mostly costly option of having filtration, **it has to be installed during the construction stages.**

When the Lane Cove tunnel , Cross City tunnel, Harbour tunnel are spoken about as examples it should be kept in mind that these are all much shorter tunnels therefore the pollution at each end will be less than from a 9 km long tunnel.

Our desire is to see the North Connex Tunnel built with properly sighted and designed stacks with World best practice motor vehicle exhaust filtration systems installed.

Malcolm Kirby

Gillian Kirby