Objections to the Beaches Link and Gore Hill Freeway Connection

Non-filtering of stacks is detrimental to health & no safe level un-filtered.

The Transport for NSW Department has claimed that there is no need to filter the emission stacks for the Beaches Link tunnel, yet they stubbornly refuse to acknowledge the health issues and the recommendations of the of a Governmental inquiry into filtering of emission stacks (The NSW Legislative Council's Public Accountability Committee report on the Impact of the WestConnex Project in 2018 recommended that; *"The NSW Government install on all current and future motorway tunnels, filtrations systems in order to reduce the level of pollutants emitted from ventilation stacks.")*.

There is no 'safe' level of pollution from emission stacks. Volume 2F of the EIS (Appendices I to K) p 69 states: "The available evidence does not suggest that there is a threshold below which health effects do not occur so there are likely to be health effects associated with background levels of PM 2.5 and PM 10 even where the concentrations are below the current guidelines". The EIS also reports air quality being affected by heat and bush-fire smoke etc. Given the location of both stacks (particularly the Wakehurst Parkway one) in areas very prone to summer fires and back-burning, will the resultant extreme air pollution cause the tunnels to close until air quality improves? Or will traffic stack pollutants continue in periods of extremely poor air quality from background emissions, thus further polluting our local homes, schools, preschools and retirement/nursing homes?

It has been confirmed that base (starting point) data sets on surrounding air quality used for charts relating to the Beaches Link sections of the EIS were not taken from the area local to Seaforth and Balgowlah. And yet we are told by the WHBLT team "As you may have already read, the independent NSW Chief Scientist and Engineer has released a report in relation to road tunnel air quality. The report found that emissions from well-designed road tunnels cause a negligible change to surrounding air quality". Given they openly admit they do not have figures on surrounding air quality for the Seaforth/Balgowlah area, how can they show "change" to levels of pollution and the resulting added mortality rates? How can we accept any 'facts' in the EIS are correct if the most basic scientific methodology has not been adhered to?

The Balgowlah stack is of particular concern because of the topography of its siting. The WHBLT project team have said their computer modelling for pollution from this stack takes into account all variables. Given we already know their figures are rubbery and misleading, how do we know exactly what has been inputted to this computer programme? This is particularly relevant given this statement from the Chief Scientist's paper on Options for Treating Road Tunnel Emissions. *"The accuracy of dispersion modelling of road tunnel stacks hinges on accurate estimates of traffic flow, traffic composition, traffic speed, vehicle emission factors, ventilation system operating parameters, and the stack exhaust temperature (which influences how buoyant the emissions are). <u>These are difficult to specify before a tunnel opens</u>. However, this uncertainty is generally effectively managed through: • Appropriately conservative modelling assumptions • 'Regulatory worst case' modelling scenarios in which a stack is assumed to operate continuously at an upper limit of emissions, which in practice would rarely or never occur. It is common practice to assess stack impacts with respect to a jurisdictions air quality impact assessment criteria which can be consistent with ambient air*

quality standards and guidelines, such as the National Environmental Protection Measure for Ambient Air Quality (AAQ NEPM), or international equivalents, and WHO Guidelines. p15

Continuing, it states, *"An exception would be dispersion in the lee of obstructions which typically requires more advanced modelling techniques and remains subject to some uncertainty."* This directly relates to the case of the Balgowlah stack. It sits in the lowest point in the valley. It is immediately surrounded to the north, west and south by hills of 100 plus metres height. It would appear any 'modelling', particularly drawn on already suspect figures, cannot accurately predict what levels of pollution will surround the Balgowlah stack.

With such information, the current Premier Gladys Berejiklian said when in Opposition in 2008*: "World's best practice is to filter tunnels. Why won't they (Labor) allow people to sleep at night, knowing their children aren't inhaling toxins that could jeopardise their health now, or in the future?"*

Sadly this is indicative of the appalling hypocrisy which we are suffering from Transport for NSW, the Liberal Government and frankly the worst Government Minister NSW has had to endure for over 30 years.

Countries such as Japan, Spain, Norway and numerous others use filtered tunnels, but Government still refuses to acknowledge the need for these state-of-the-art filtration systems on NSW tunnel stacks. The EIS continually claims there is no need for tunnel filtration in properly designed tunnels, yet given the numerous flaws and misleading 'facts' in the EIS, the public does not trust we will get a "properly designed" tunnel.

The only reason not to filter the stacks is purely economic – they cost more to install and run than the current proposed tunnel design. Given the running costs will be borne by whichever concern buys the tunnel system, one must assume the Liberal Party is trying to keep costs down for the benefit of potential owners. With absolutely no regard for the health of those voters living near the stacks.

Proximity of stacks to schools & Seaforth 'bowl' dangerous.

The most worrying aspect of the tunnel proposal has to be the likely consequences of the unfiltered stacks to be installed at both the Balgowlah and the Wakehurst Parkway entry/exit points. The topography of the Seaforth area between these stacks are destined to endure the most concentrated emissions, based on the Chief Scientist's model.

Local schools, homes, shops and businesses are within the 200-1200m radius. Having read the chapters and Annexures on air quality, and having posed questions to TfNSW, we are extremely concerned about the quality, or otherwise, of the air quality information published in the EIS and the likely long-term impacts of the unfiltered emissions stacks. Once again, the Premier Gladys Berejiklian's comments when in opposition have been thrown in our faces.

The Air Quality sections of the EIS relating to the Wakehurst Parkway and Burnt Bridge Deviation are a cynical exercise to deceive and confuse both the public, and the politicians who are looking to this document for accurate information.

Transparent air quality studies and modelling of the sites of the stacks must be undertaken to deliver reliable information that can withstand scientific scrutiny. These must be available to both the public, not just the politicians who are making this decision on our behalf.

Environmental damage to Burnt Bridge Creek & Manly Dam

The proposed damage to these environments include the felling of almost 2,000 trees from the Manly Dam catchment in areas of known risk biodiversity (including endangered species), the de-watering of the Burnt Bridge Creek catchment leading to drying up of a critical water system running from Seaforth to the ocean at Queenscliff, the removal of hundreds more trees along the creek and the risk to Middle Harbour posed by the dredging of contaminated sediment and unavoidable sediments plumes across the Harbour. Some 23 endangered species will be impacted across the project.

With the Wakehurst Parkway becoming a 4 to 6 lane freeway across a narrow escarpment, this will cause ongoing pollution into sensitive creeks and waterways at Manly Dam and Garigal National Park. 39 football fields of bushland would be cleared as well as the forementioned 2,000 trees. The road would be raised several metres in some areas- making it audible and visible, day and night, for miles around.

The unfiltered exhaust stacks would emit double the maximum limit of particulates recommended by the World Health Authority. This would cover a 1.2km radius per stack. Treasured threatened species such as the Eastern Pygmy Possum (plus diverse bird life) would suffer habitat loss. The capacity to swim in clean freshwater at Manly Dam would be put at considerable risk. Water levels will drop as aquifers are drained. Our unique Climbing Galaxias fish faces a bleak future.

At Balgowlah, Burnt Bridge Creek Deviation would become 12 lanes. The creek itself would die as its flow is to be reduced by 96%. During construction, 425,000 litres of waste water will be washed into Manly Lagoon every Day!

At Middle Harbour there is potential for toxic chemicals being disturbed during dredging, posing a major threat to the marine environment. This flawed plan needs major changes and modern public transport options must be explored.

Pointlessness of a road tunnel, when Metro line far preferable.

Transport for NSW has published fanciful projections of time savings for northern beaches residents with the completion of the Beaches Link Tunnel. The EIS spruiks the status of Military Road is the 7th busiest road corridor in NSW and that Spit Road is the 10th busiest road corridor. It goes on to claim as a major benefit the in the EIS for the Beaches Link Tunnel is that traffic along the Spit Road and Military Road corridors will be reduced once the Beaches Link Tunnel is built and is operating. This is based on a projection for 2037 of 10% less traffic travelling along Military Road, and There will be 33% less traffic travelling on Spit Road – from Spit Bridge to Spit Junction in Mosman.

This forecast was developed in 2016 and does not factor in recent developments, such as increased bus transport capacity via the Dee Why to Chatswood Express Bus Service, and the popularity of the B-line service. Since COVID-19, the growing adoption of WFH or hybrid work models is likely to reshape the demand for traffic models. Although the EIS argues that traffic is 'back to normal' across Greater Sydney and speculates that traffic flow will continue to grow, there is no evidence presented for this assumption. Likewise, the EIS does not take into account sudden reductions in bus services across the Seaforth/Balgowlah area before Christmas, which has greatly limited public transport options for many workers and school children, forcing some people back into cars.

The EIS also reveals that local congestion will worsen, not only during construction but once the tunnel is operational, due to congestion on roads around tunnel entries and the creation of multiple new rat runs. For Frenchs Forest (7.7.1), for example, a reduction in travel speeds of 13% is forecast in 2037, indicating that the same communities forced to suffer through so many years of construction at either end of the Wakehurst Parkway – and the endure to loss of so much of their natural environment – will actually end up worse off. On the subject of travelling time 'savings', the CSIRO has reported that pollution is regulated in the M5 East Tunnel by lowering traffic speed when pollution/car volumes are high. Common practice in NSW tunnels appears the lower of travel speeds during periods of high demand (ie. peak hours), are used to regulate pollution. This further erodes any travelling time 'savings' touted in the EIS.

The EIS also ignores recent surveys revealing the preferences of residents. For example, Warringah MP Zali Steggall's Transport Survey (2019) found only 38 per cent of residents Manly, Fairlight, Balgowlah, North Balgowlah, Seaforth, Allambie Heights and Frenchs Forest supported a car tunnel but that the majority of residents wanted better public transport, including a Dee Why to Chatswood public transport corridor. The only area where more than half of residents wanted a tunnel was Mosman (58%) which will endure none of the direct negative impacts of construction and operation.

The bigger picture: In 1983 the original Warringah Corridor transport inquiry (Kirby) ultimately rejected the proposal to build a freeway connected to the Warringah Expressway. The inquiry found in favour of developing public transport/mass transit for two key reasons. 1. That additional road capacity would be accompanied by development that would increase the population of the northern beaches and, 2. in the absence of an effective mass transit system that population increase would put more cars on the road, and the new freeway would soon become congested, eroding any promised saving in travel times. Such scenarios have been documented over and over again in cities all over the world. The EIS acknowledges that increased housing development would accompany the building of the Beaches Link tunnel, thereby increasing traffic. As no dedicated public transport lane or service is factored into the design it is reasonable to conclude that any early benefits would be quickly eroded as more cars came onto the road. The EIS also fails to address the reality that the tunnel is two-way. Given the serious limitations on parking and congestions along the northern beaches' coastline, particularly during summer weekends, what provisions have been made for a mass influx of cars? Likewise, what provision has been made for accommodating many more private cars in the CBD and managing congestion as they exit the tunnel. The EIS provides no

reassurance that the interface of the tunnel with surrounding road systems and local communities had been considered.

There is not an argument that something has to be done to address the difficulties of transport to and from the Northern Beaches, but the Beaches Link tunnel is not the solution and certainly not going to deliver the benefits being touted by TfNSW. Having endured several of the community engagement sessions conducted by TfNSW, the constant evasiveness, misinformation and arrogant dismissal of the most difficult questions leaves me in no doubt that a disaster is in the offing. Coupled with recent debacles with local bus services and the on-going undermining of the Manly Freshwater ferries, we have suffered enough at the hands of arrogant self-serving bureaucrats and Ministers.

Finally, what has not been spoken about is the alternative tunnelling that would negate the need for polluting emission stacks and solve many of the transportation issues. The Government have been happy to trumpet their achievements in other parts of Sydney with Metro services, yet fail to consider this far preferable option. There have been comments on difficulties of gradients etc, but surely these are technical issues that solutions can be found for.