

Anzac Park Public School P&C  
2 Anzac Ave  
Camberay NSW 2062  
Sydney, Australia

Roads and Maritime Services  
20-44 Ennis Road  
Milsons Point NSW 2061

30 November, 2018

**Re: Western Harbour Tunnel & Beaches Link Reference Design**

Dear Sir/ Madam,

We write to you on behalf of the Anzac Park Public School P&C in regard to the Western Harbour Tunnel & Beaches Link (also known as Westconnex 4a and 4b) Reference Design.

**Our objections**

**Climate Change, Sustainability, Accessibility, Liveability**

On behalf of our children, we object to these projects. Climate Change is the biggest concern facing our children's futures. Greenhouse gas emissions from transport emissions and environmental impacts from car and truck manufacturing **must** be reduced, not increased. These road projects are in complete conflict with our children's need to combat climate change.

Furthermore, a more liveable, accessible, sustainable city will **never** be achieved with these road projects. Sydney needs mass transit, rapid public transport for congestion relief and future proofing for population increase. These road projects will produce more traffic in Sydney, and in particular to the new Warringah Freeway interchange near our school. Not to mention the surrounding road network. If the problem is congestion, then more roads are not the answer.

By committing to the Northern Beaches link, and signing a contract with Transurban (the likely contract winner), the contract will preclude a Public Transport option that acts in competition with Transurban toll road profits. You are permanently subjecting the Northern Beaches residents to reliance on their cars, and permanently subjecting our children and their environment to extraordinary amounts of additional pollution due to induced traffic demand.

**IF you build road tunnels, make them safe - Filter**

We object to unfiltered ventilation stacks. If these road projects are to be built, then they must be safe. Ventilation stacks (2 of which are located within 300m of our school) **must** be filtered.

There will be **over 40km of additional polluting road being pumped out unfiltered** from the stacks near our school. Regardless of how much air you blow out of the stack along with the pollution (ventilation), the **dose** you will be delivering to our community is undisputedly the largest public health experiment we have ever seen. And the effect of the dose is cumulative.

The RMS policy to not filter at any cost is wrong. The M5 East filtration trial cannot be extrapolated to filtration of stacks, which is what we are demanding. Filtration works and provides a demonstrable improvement to air quality. Filtration removes 90% of pollutants. It is used by first world countries on long road tunnels (over 5km) in urban areas. There is no other tunnel of this length with longitudinal ventilation in an urban area in the world. Other countries filter or do not allow trucks to travel in them.

### Construction impact concerns

We object to adverse construction impacts for over 6 years on our school community. If these road tunnels are built, our school community request genuine consultation on mitigation of construction impacts eg. Truck movements, dust impacts, noise impacts. It has been shown in the Westconnex Parliamentary Inquiry that mitigation for other schools on the other Westconnex project phases have not been sufficiently enforced. We require that the sub-contracting of works does not sub-contract or dilute the responsibility that the government has to our children and our school community.

### Our requirements of the EIS and future project stages

We require that the following information be contained within the EIS or within the approval phase of the EIS. We have already asked the Department of Environment and Planning for the information contained within the headings of Air Quality Monitoring, Health and Filtration to be included within the SEARS. We request that our school is consulted and worked with at all stages of the project.

### Air Quality Monitoring

- We would like the EIS to advise of the total dump in tonnes of particulate matter (PM10 and PM2.5) from the pollution emissions of the stacks.  
Current thinking about ambient air quality standards in the UK and US are moving toward consideration of exposure rather than just ambient concentrations. They advise that the focus should be on the times and places where large numbers of the population are likely to be exposed. NIWA supports this and advocates its adoption in Australasia.
- We request that the air quality monitoring pre- and post- implementation be available in real time, on-line. We note that our community's freedom of information, GIPA requests to understand air quality have been rejected.
- We request that you ensure that baseline and ongoing air quality monitoring is not limited or influenced by a private operator or tunnel developer. According to the 2008 National Health and Medical Research Council report private tunnel operators hindered this monitoring: "We would like to comment on how difficult it was to obtain data about some Australian tunnels, especially where private operators were involved. In some cases this hindered or delayed our analysis."
- We would like the RMS to do artificial tracer releases to support modelling of tunnel stack emissions
- At the most recent RMS meeting with Anzac Park Public School parents on 7 August 2018, the RMS presented the reference design. The RMS presented a graph which showed: 1. the background air quality; then 2. the increase from surface road traffic; then 3. the impact from the ventilation stack. The purpose was to show that the impact from the stack was smaller than the other two parts. This graph was misleading as each of these measurements on the graph are significantly larger in the vicinity of Anzac Park Public School than what these graphs are showing<sup>1</sup>. The EIS should contain actual measurements and estimations of emissions for each of the 3 parts of same graph for current and future impact.
- We request again that the RMS monitor air quality at the school (as was initially promised) before the EIS comes out. The degradation of air quality can only be fully understood if the current situation is known.

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<sup>1</sup> The background air quality is not even known – as we have no baseline air quality monitoring in the vicinity of Anzac Park Public School. The impact of surface road traffic is significant due to the existing 10 lane freeway, Ernest St and Miller St. Additionally, pollution from surface road traffic will increase as the traffic from both exits will impact greatly on this measure. And finally, the impact from the ventilation stacks will be significantly larger, with 2 tunnels that are each more than twice as long as the tunnel which the RMS were presenting.

## Health

- We would like to have the NSW Health department do a baseline measure of children and residential population health. And measure cellular- and bio-markers related to traffic exhaust. If the RMS are determined to inflict the largest public health experiment in our country's history (pumping over 40km of polluting road over Australia's largest education precinct), then we expect the NSW Health Department to properly study its impacts.
- We request the assessment and full disclosure of the increase in child morbidity and mortality expected per tunnel stack
- We request the assessment of the impact and risk to human health due to the dive site and construction sites in the vicinity as the soil contains lead from prior use of leaded petrol and should not be disturbed - particularly close to a primary school.
- We request that detailed assessment of the noise impact on our schools be performed and sufficient remediation be undertaken prior to the start of the projects

## Filtration

Anzac Park Public School P&C requested that consideration of filtration be included in the SEARS.

Unfortunately, the Department of Environment & Planning did not understand the difference between ventilation and filtration (they kept confusing these terms with us over the phone) and didn't include this. We find this lack of knowledge very concerning.

- Nevertheless, we request that filtered stack tunnel design be prepared and tendered by Govt/ RMS as per the 2006-7 NSW Tunnels inquiry chaired by the Hon Rev Nile recommended for all future long tunnels, which the Liberal & National Parties supported.
- We would like the EIS to consider the filtration of the stacks, and a cost benefit analysis of filtration versus cost of increased morbidity, mortality and ongoing health costs based on statistical cost of life.
- We would like consideration of additional NOx filtration technology in the EIS (eg. Photocatalytic paint)

## Independent Verification of Pollution Dispersion Modelling

- We require that the pollution dispersion modelling of the Northern Beaches and Western Harbour tunnels be assessed together, cumulatively, not separately.
- We require that the GRAMM/ GRAL modelling take into account the wall of skyscrapers to be built in Crows Nest that will inhibit dispersion.
- We require the topography considered in the GRAMM/ GRAL modelling to be advised to the North Sydney Council planning department and Department of Environment and Planning so that the current St Leonards/ Crows Nest Planning proposal can be informed of the farthest point for high-rise development before the air quality modelling and dispersion is impacted.
- We acknowledge the amended licensing requirements of tunnel management to be imposed by the EPA. However, we request that an **independent** review is undertaken by a mutually agreed upon, internationally recognised body to produce independent GRAMM/ GRAL air quality modelling using the information used by the RMS GRAMM/ GRAL modellers. The RMS use the same 2 'independent modellers' for every tunnel. We do not feel that this is a truly independent view.
- We request detailed review of this air quality modelling by the Federal Health Ministry and NSW Health Ministry to analyse and to understand what is the point at which they would ever consider filtration, considering the urban environment. That is: an assessment of the length of tunnel where filtration would be necessary; modelling of the length of a tunnel against pollution stack height where air quality is deemed to be safe for a particular ventilation rate; modelling the cumulative effect on air quality of two long road tunnels and their pollution stacks in such close proximity to one another and to a 10 lane freeway, Ernest St and Miller St – as will be the case for our community in the vicinity of the Northern Beaches and Western Harbour tunnels and Warringah Freeway interchange.

## Air Quality Management

We request that the RMS undertake an ongoing program of Air Quality Management, which radically reduces emissions.<sup>2</sup> This should include:

- Compulsory in-service vehicle emissions testing
- A diesel retrofit programme to limit particulate pollution
- Facilitate a decision for a date for the phase-out of diesel and petrol vehicles.  
Australia is one of only a few countries in the OECD who do not have a plan for, or an end date for, the phase out of diesel and petrol vehicles. Even India has defined this.
- Roll-out education programmes around fuel efficiency and avoiding engine idling.
- Include fuel efficiency in the Learner Driver test, as they do in countries such as Switzerland (gradual acceleration, choosing the most fuel efficient gear)

We need you to act in the interests of our children and their futures. We implore you to do what is **best** for them, not what is nominally acceptable to the RMS.

This is our children's future. This is their future city. And this is the air that our children will breathe **every** day.

Yours sincerely,

## Anzac Park Public School P&C

PP.

Joanna Zanello

Business Owner

Anzac Park Public School P&C President

Mother of two children at Anzac Park Public School

Alison Taylor

Bachelor of Engineering (Chemical), Hons Class I

Anzac Park Public School P&C Tunnels sub-committee

Mother of two children at Anzac Park Public School

Willoughby electorate

Copy to:

*Premier Gladys Berejiklian, Willoughby Member and Premier of NSW*

*Hon. Rob Stokes MP, Minister for Education*

*Hon. Melinda Pavey MP, Minister for Roads, Maritime and Freight*

*Hon. Gabrielle Upton MP, Minister for the Environment*

*Hon. Anthony Roberts MP, Minister for Planning*

*Hon. Andrew Constance MP, Minister for Transport*

*Hon. Brad Hazzard MP, Minister for Health, Minister for Medical Research*

*Hon. Stuart Ayres MP, Minister for Westconnex*

*Hon. Matt Kean MP, Minister for Innovation and Better Regulation*

*NSW Opposition Shadow ministers for the above portfolios*

*Mayor Jilly Gibson, North Sydney Mayor*

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<sup>2</sup> When accessing the RMS website to see "How is Air Quality Managed?" page, one is presented with a glossy brochure and a statement about the M5 East tunnel that states:

*"The M5 East Tunnel is fitted with a smoky vehicle camera.... This deters drivers of smoky trucks from using the tunnel and encourages them to repair their trucks."*

This is the **only** air quality management performed by the RMS, which is very disconcerting. The RMS should do far more in their remit as the State's manager of vehicle safety, which must include safety of emissions.