

Mr Glenn Snow  
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GPO Box 39  
SYDNEY NSW 2001

**NOTE: Redacted sections of this document contained issues not relevant to the Submissions and Preferred Infrastructure Report.**

Dear Mr Snow

**WestConnex M4-M5 Link project (SSI 16\_7485)**

Thank you for the opportunity to further comment on the response to the issues raised by NSW Health following the EIA, the Preferred Infrastructure Report, and the Draft Consent Conditions for the WestConnex M4-M5 Link project (SSI 16\_7485). NSW Health provides the following comments for your consideration.

NSW Health has reviewed the responses provided by the proponent regarding our comments on the Human Health Risk Assessment (HHRA), Air Quality Assessment, and Noise and Vibration Assessment. We welcome and support the majority of the responses and clarifications however we have some further comments related to air quality, noise, and associated health risks which are detailed in Appendix A.

NSW Health has also reviewed the Preferred Infrastructure Report and the draft consent conditions provided on the 12<sup>th</sup> February 2018. Additional comments are provided in the Appendix B and C respectively.

Thank you for your consideration of NSW Health's further comments regarding the WestConnex M4-M5 Link project. If you would like more information on any of the points raised in our submission, please contact Dr Ben Scalley, Director, Environmental Health Branch on 9424 5721.

Yours sincerely



Dr Kerry Chant PSM  
Chief Health Officer and Deputy Secretary  
Population and Public Health

22/2/18

**Appendix A: Detailed comments from NSW Health's review of the Proponent's Responses to NSW Health's comments on the Environmental Impact Statement for the WestConnex M4-M5 Link project (SSI 16\_7485)**

Below are specific comments related to specific sections of the Response.

**B1.1 Air quality**

**B1.1.2 Minimising exposure to traffic related air pollution**

The Response notes that for some areas located near key surface roads, a small increase in pollutant concentration may occur during the operational phase. However, as described in the HHRA (Appendix K) the maximum increase in risks are considered tolerable/acceptable, except for an industrial location near Sydney Airport and hypothetical future elevated receptors near St Peters which are discussed below in section B1.2.3 and B1.2.4 respectively.

**B1.1.5 Air quality impacts from construction**

The Response notes that a Construction Air Quality Management Plan will be prepared in accordance with the conditions of approval for the project. NSW Health requests that the conditions of approval include that a draft Construction Air Quality Management Plan be made available to the appropriate regulatory authority and NSW Health for their review and that any comments are addressed in a final Construction Air Quality Management Plan prior to the commencement of any construction activity.

**B1.2 Human health**

**B1.2.3 Industrial location near Sydney Airport**

NSW Health understands that the health risk calculated at this location is associated with forecast emissions from a yet to be designed and built surface Sydney Gateway road. However, as this health risk calculation has come about from the cumulative assessment, any changes to the M4-M5 project that could mitigate potential unacceptable health risk in combination with the future design of the Sydney Gateway project should be considered. It is also important to ensure that the explanation for the reasons why this health risk calculation is "likely to be unrealistic" is as clear as possible for the public to understand.

**B1.2.4 Elevated receptors near the St Peters interchange**

The Response includes a summary of the implications of the results of the assessment of air quality impacts on elevated receivers near the St Peters interchange. The statement that "Planning controls should be developed in the vicinity of St Peters to ensure future developments at heights 10 metres or higher are not adversely impacted by the ventilation outlets" is particularly important.



### **B1.3 Noise and vibration**

#### **B1.3.1 Potential impacts on the Royal Prince Alfred Hospital**

NSW Health welcomes the proponent's commitment to consulting with the Royal Prince Alfred Hospital (RPAH) management during detailed design to ensure vibration levels do not damage sensitive hospital equipment and create other potential vibration impacts. In light of the proponent's commitment to consultation with RPAH management, we consider that where the proponent states that it is "**anticipated** that the Royal Prince Alfred Hospital would be consulted during the detailed design", that a commitment to consultation is provided.

NSW Health recognises that the EIS assessed noise levels at Royal Prince Alfred Hospital and did not find any exceedances of the relevant noise criteria. However, given the sensitivity of the hospital site to noise impacts, it is recommended that Hospital management be consulted about noise impacts during the detailed design stage in coordination with the proponent's consultation with RPAH management regarding vibration.

#### **B1.3.2 Construction noise mitigation**

In the EIS and the Response, the proponent confirms that the construction activities are expected to result in exceedances of noise criteria at most noise catchment areas, if not appropriately mitigated. It is therefore critical that appropriate noise mitigation is implemented.

NSW Health acknowledges there is a wide range of mitigation measures that are proposed to minimise noise impacts on the community. However, there is only limited detail on specific mitigation measures provided in the EIS and the response to submissions. We understand that the detail will be provided in the Construction Noise and Vibration Management Plan at the detailed design stage. It therefore remains important that the appropriate regulatory authority and NSW Health review the Construction Noise and Vibration Management Plan prior to the commencement of construction to ensure that mitigation measures are appropriate.

NSW Health notes that the proponent emphasises the role of the acoustics advisor in ensuring appropriate mitigation is implemented. We agree that the acoustics advisor is an important mechanism and support the requirement for the acoustics advisor be suitably qualified and independent of the design and construction contractor.

#### **B1.3.3 Longer duration of construction noise impacts due to multiple WestConnex projects**

The Response notes that impacts from the concurrent construction of WestConnex projects at St Peters and Haberfield/Ashfield are not expected to be short-term and may last up to 7 years for some receptors.

NSW Health acknowledges the additional strategies proposed in the Response to minimise longer term noise impacts associated with concurrent construction of WestConnex projects, including reducing the construction footprint of the Wattle Street civil and tunnel site and providing a heavy vehicle marshalling facility at White Bay. The extent to which these strategies will reduce predicted noise levels requires assessment.

Given the extended construction periods, NSW Health recommends that a conservative approach should be taken in mitigating longer term noise impacts for receptors at St Peters and Haberfield/Ashfield. The Construction Noise and Vibration Management Plan should identify people who are expected to be exposed to long-term noise impacts and develop specific mitigation measures for them.

#### **B1.3.5 Effect of lower noise level reduction than assumed in the EIS**

The EIS derived external noise management levels for construction for some sensitive people, including at educational facilities and places of worship by adding 10 dBA to an internal noise management level. The derived external noise management levels were then compared to predicted external noise levels to calculate exceedances. The assumption of a 10 dBA noise reduction from exterior to interior therefore impacts on the number of receptors exceeding the noise management levels, the magnitude of these exceedances, and appropriate mitigation measures to be implemented.

The proponent states that some building designs and conditions may provide less noise reduction. For identified sensitive people where the 10 dBA assumption was applied and which are predicted to exceed noise management levels, there may be benefit in considering actual exterior-to-interior noise reduction levels to determine mitigation measures.

#### **B1.3.6 Mitigation of operational noise impacts**

NSW Health agrees that a key mechanism to ensure appropriate mitigation of operational noise impacts is the assessment of actual noise impacts within 12 months of the commencement of operation of the project, and the implementation of further mitigation if necessary. NSW Health recommends that the acoustics advisor takes an active role in this assessment and recommends and endorses any further mitigation measures.



## Appendix B: Detailed comments from NSW Health's review of the Proponent's **Preferred Infrastructure Report** for the WestConnex M4-M5 Link project (SSI 16\_7485)

### **Cumulative impacts**

The inclusion of the White Bay Civil Site in the Preferred Infrastructure Report (The Report) will provide additional off street parking for construction workforce and be used for truck marshalling, resulting in the mitigation of a number of potential negative impacts on the broader inner west community from construction traffic related to the M4-M5 Link.

However, such use of the White Bay Civil Site may compound the impacts of the White Bay Cruise Terminal and other planned developments on the more localised community surrounding White Bay. The cumulative and consecutive impacts from various projects on the White Bay community should be mitigated and the specific mitigation techniques should be provided in the Report.

The potential for additional cumulative impacts including noise (such as trucks idling and reversing), air pollution, and amenity to the White Bay community should be minimised through ongoing and close liaison with the Ports Authority of NSW and Department of Planning and Environment (DPE). NSW Health is pleased that consultation has been undertaken with the Ports Authority of NSW, Urban Growth, and other stakeholders, and this is intended to continue throughout the life of the project and recommend this include specific consideration of the above issues related to White Bay Cruise Terminal.

NSW Health is pleased to note that the cumulative impacts of multiple developments in the area are considered in the Report; however it would benefit from greater detail as only the Western Harbour Tunnel and three smaller ports projects are taken into consideration, whilst major projects including the redevelopment of Bays Precinct, the Western Sydney Metro with proposed Rozelle Station, the Rozelle Rail Yards Development, and the WestConnex M4-M5 Link do not seem to have been taken into consideration.

The White Bay Cruise Terminal is only considered in regards to the traffic impact of it on the proposed White Bay Community and vice versa. There is no consideration of the other cumulative impacts from the site such as noise, in addition to existing impacts from White Bay Cruise Terminal. Additionally, due to the existing community concern related to White Bay Cruise Terminal, the White Bay community should be considered 'sensitive to change' to further development in any considerations (e.g. in table D2-26 page D2-51 the residents of Mansfield Street and Batty Street Rozelle and Balmain have been considered 'moderately' sensitive to change with respect to night lighting impacts).

A further issue is that cumulative impacts are only considered in the Report if they are concurrent with the operation of the White Bay Civil Site. An important issue of consecutive impacts as cumulative impacts resulting in "construction fatigue" from years of consecutive impacts including exposure to increased noise and vibrations, traffic and other disruptions, amenity loss, and exposure to increased air pollution needs to be considered.

### **Noise and Vibration**

The Report would be strengthened by quantifying the potential benefits from the reconfiguration of the White Bay Civil Site.

The Report predicts some noise impacts for residents near the White Bay Civil Site heavy vehicle marshalling facility levels that might be of health concern. These impacts are described as minor, occurring over a typical and night time period and that noise mitigation measures will be required.

The Report does not specify exact mitigation measures to be implemented as this will be specified in the Construction Noise and Vibration Management Plan. As recommended previously, the Construction Noise and Vibration Management Plan should be reviewed by the appropriate regulatory authority and NSW Health prior to construction commencing.

There is emerging evidence of adverse health outcomes from environmental noise, particularly related to sleep disturbance and cardiovascular disease. The report details a small number of residential properties along Batty Street and Mansfield Street that are projected to experience night time noise exceedances above the screening criteria for sleep disturbance. We suggest that the Construction Noise and Vibration Management Plan takes a strong focus on mitigation of noise at night time from construction works. This is particularly important considering the 3 year duration of the project.

NSW Health is pleased to see a clear proposal to use noise barriers as required (Table D2-27), and ongoing monitoring during the operation life of the site. As noise and vibration impacts are projects to affect some receivers, NSW Health recommends that all reasonable measures be considered to mitigate noise and vibration to these receivers during both construction and operation. Additionally, the independent acoustics advisor should play a central role in evaluating the effectiveness of these noise mitigation measures.

### **Air quality**

During construction of the White Bay Civil Site local air quality may be impacted from both increase in heavy construction vehicle emissions and dust generation. Dust generation during demolition that may include contaminated materials needs to be managed, mitigated and evaluated rigorously.

Best practice dust suppression techniques should be included in the White Bay Civil Site construction plan, and steps taken to ensure they are applied correctly to suppress any dust.

### **Contaminated Land Management**

The proposed White Bay Civil Site will include significant construction on an area with historical land reclamation and industrial use and a high probability of soil contamination. Previous contamination investigations as part of The Bays Precinct Urban Transformation Program have identified a potential risk of contamination including heavy metals, total petroleum hydrocarbons (TPH), polycyclic aromatic hydrocarbons (PAHs) and asbestos, which during that investigation were found from the ground level to a depth of 2 metres.

Although the proposed construction includes digging to only a modest depth (500mm) all reasonable measures must be taken to ensure that the site is suitable for its intended use and that the contamination does not impact surrounding areas and produce a feasible pathway to impact human health.

### **Human Health Risk**

Table D2-3 on page D2-8 concludes that there will be no significant additional human health impacts from this site. The community may raise concerns that the assessment of the potential impacts from the site has only been considered over the short term. The Health Risk assessment and communications about the conclusions pertaining to human health impacts should not be based on a short term consideration of exposure. NSW Health recommends that exposures related to the operation of White Bay Civil Site are considered medium or long term when analysing and communicating the health impacts and risk assessment.