DOC21/687721 11 August 2021

Mr Fadi Shakir
Senior Planner
Transport Assessments
Department of Planning, Industry and Environment

(via the Major Projects Planning Portal)

Dear Mr Shakir

**Kamay Ferry Wharf Project (SSI 10049)**
**Advice on Environmental Impact Statement (EIS)**

I am writing to you in reply to your invitation to the NSW Environment Protection Authority (EPA) to provide comment on the Environmental Impact Statement (EIS) for the above project.

The EPA understands the project involves the reinstatement of two ferry wharves in Botany Bay at La Perouse and Kurnell to facilitate a ferry service operating between the two locations, and that the ferry services will operate between 7 am and 7 pm.

The EPA has reviewed relevant EIS documents including:

- *Environment Impact Statement*, prepared by TfNSW, dated June 2021 (EIS)
- Appendix O: *Surface Noise and Vibration Impact Assessment Report*, Final, prepared by Arup, dated 10 June 2021 (NIA)
- Appendix Q: *Targeted Site Investigation*, prepared by ERM, dated 10 June 2021 (TSI)
- Appendix Q1: *Preliminary Site Investigation – La Perouse Site,* prepared by ERM, dated 2 December 2020 (PSI La Perouse)
- Appendix Q2: *Preliminary Site Investigation – Kurnell Site,* prepared by ERM, dated 2 December 2020 (PSI Kurnell)
- Appendix S: *Surface Water Assessment Report*, Final, prepared by ARUP, dated 7 April 2021
- Appendix T: *Impacts to Coastal Processes*, prepared by Cardno, dated 23 June 2021

Based on the information provided, the proposal does not require an environment protection licence under the *Protection of the Environment Operations Act 1997* (POEO Act). However, the EPA will be the Appropriate Regulatory Authority (ARA) for the construction of the project, due to Section 6(2)(c) of the POEO Act which states: *"A local authority is the appropriate regulatory authority for non-scheduled activities in its area, except in relation to … (c) activities carried on by the State or a public authority, whether at premises occupied by the State or a public authority or otherwise ..."* As Transport for NSW (TfNSW) is a public authority, the EPA will be the ARA during construction. It is understood that commercial ferry operators will provide the service, and therefore the EPA will not be the ARA during operation.

The EPA requires additional information for noise and vibration impacts, surface water quality, and contamination to be able to adequately assess the environmental impacts of the proposal. The EPA's requirements are outlined at **Appendix A**.

Should you require clarification of any of the above please contact Anna Timbrell on 9274 6345 or email anna.timbrell@epa.nsw.gov.au

Yours sincerely

**MITCHELL BENNETT**
**Unit Head – Statutory Planning**

# APPENDIX A

## 1. Noise and Vibration

The NIA has adopted the *Noise Policy for Industry* (EPA, 2017) (NPfI) to assess operational noise and the *Interim Construction Noise Guideline* (DECC, 2009) (ICNG) to assess construction noise from the project. However, there are several data gaps in the assessment.

The EPA requires the following information to be able to adequately assess the proposal. Points 1 to 3 are the most critical assessment issues.

1. Long term background noise monitoring was performed at both La Perouse and Kurnell. The results are presented in the NIA at Table 14. The background noise level (RBL) is used to derive both construction and operational noise objectives. The daytime RBL for both La Perouse and Kurnell is reported as 43 dB(A). The resulting operational NPfI 'project noise trigger levels' (PNTL) for the project during the daytime is $L_{Aeq,15min}$ 48 dB(A) for both Kurnell and La Perouse (i.e. RBL plus 5 dB). However, the NIA at Table 27 identifies the daytime PNTL for Kurnell as $L_{Aeq,15min}$ 53 dB and not 48 dB.

   Predicted operational noise levels from the project are presented in the NIA at Table 43. Table 43 cites the daytime PNTL for La Perouse as $L_{Aeq,15min}$ 53 dB and not 48 dB. When the correct PNTL is applied, the conclusions in the NIA that no operational noise impacts are predicted for residential receivers is incorrect. **The proponent will need to undertake detailed checking of the data that informs the assessment, the information presented in the assessment and the conclusions drawn in the NIA**.

2. In Appendix B of the NIA, examination of the logger graphs for the La Perouse monitoring location shows daily trends of continuous elevated noise levels typically between 11 am to 8 pm. The $L_{A90}$ levels during this period are at a constant level of approximately $L_{A90}$ 61-62 dB. This is likely the result of air conditioning or refrigeration plant (located immediately next to the logger) or kitchen exhaust plant associated with the restaurant immediately below the logger location. **Consequently, the location is inappropriate to determine background noise levels representative of residential receiver locations in the area.**

3. The project description in the NIA indicates that the wharves will be restricted to 'daylight hours'. The NIA indicates that the operating hours of the ferry wharves have not been confirmed but have been assumed to be 7 am to 7 pm. **Based on the assumed hours in the NIA alone, an assessment of potential evening operations should have been undertaken, however no such assessment is presented in the NIA**. Additionally, 'daylight hours' at various stages of the year would include hours well before 7 am and well after 7 pm. *If* this is the case, an assessment of night-time operations, i.e. before 7 am should also be undertaken unless firm commitments are made, or conditions imposed, restricting night-time operations of the wharves. Any assessment of night-time operation should include an assessment of maximum noise level events in accordance with the NPfI.

   ***Notes to points 1 and 3*****:** *The EPA notes that a conservative operational assessment approach has been taken where a +10 dB correction has been applied to predicted operational levels to account for potential 'annoying noise characteristics' of ferries. However, this is not considered to be a mitigating factor in incorrectly undertaking the impact assessment against incorrect PNTLs. Note too that the NPfI defines day, evening, and night periods for assessment purposes.*

4. The **operational noise modelling needs to consider the operation of a PA address system on the wharves**.

5. The NIA indicates that construction works will be during standard hours except for marine piling works. It is the EPA's understanding that the need for night-time marine piling is largely due to

calmer surface conditions at night. However, the EPA notes the proposal to use jack-up barges to complete marine piling works which largely negates the need to consider surface conditions. **The potential need for out of standard hours works will need to be further justified if it is to be contemplated in any planning approval**. Standard hours of construction work are defined in the ICNG.

6. **As part of the Response to Submissions, the NPfI PNTLs assigned to community premises, childcare centres and educational institutions should be fully explained**.

7. Regarding construction sound power levels, section 4.1.2 indicates that: *"The equipment below* [i.e. Tables 32 and 33] *has been assumed to operate concurrently and continuously over a 15 minute period (a typical worst case assumption)*. However, Tables 32 and 33 appear to adjust sound power levels based on a 'duty cycle' i.e. how long the plant is predicted to operate over a 15 minute period. **The difference between the statement in section 4.1.2 and Tables 32 and 33 needs to be explained and any resulting changes to the construction noise impact assessment identified**.

8. While the operational assessment of the proposed ferries and other marine craft has conservatively considered a +10 dB factor to account for annoying noise characteristics such as tonality and low frequency noise, the NPfI first requires that these characteristics be designed or mitigated so as to be not present. **Any approval granted for this proposal should require the proponent to develop best practice noise performance requirements for the procurement, construction and operation of the ferry vessels, including eliminating annoying noise characteristics as identified int eh NPfI**.

9. There are errors regarding some of the sensitive residential receiver locations at La Perouse: the NIA does not appear to have considered the residential accommodation above 1609 Anzac Parade (above Danny's Seafood Restaurant). La Perouse Res 2 is located at 27 Goorawahl Avenue and is identified as 5 storeys, however this is a single story house. 28 Goorawahl Avenue would be slightly closer to the project. **This should be reviewed, and any corrections made**.

10. In section 5.3 of the NIA, the operational traffic noise assessment has considered impacts at Opening Year (2024) and Design Year (2036). However, the design year assessment does not appear to consider forecast traffic movements, but rather presents the traffic volumes, that if not exceeded would satisfy the policy guidelines. **The operational traffic assessment should be based on forecast 2036 traffic volumes**.

## 2. Surface Water

Uncontrolled fill, historical contamination, and hazardous building materials could be present in the soils, sediment and/or groundwater. Excavation during construction could mobilise these contaminants. The proponent has committed to the preparation and implementation of a **Soil and Water Management Plan** that will include mitigation and offsite disposal measures if contaminated material is encountered. The proponent has also committed to the preparation and implementation of an **Acid Sulphate Materials Management Plan** and an **Erosion and Sediment Control Plan**.

**The EPA considers that any potential impacts to surface waters can be adequately managed through further assessment of the potential risks and development and implementation of relevant mitigation, monitoring and management actions.** Further discussion of risks and recommendations are provided in Section 3. Contamination.

**The proponent needs to provide the following information for the EPA to adequately assess the environmental impacts of the proposal:**:

1. The results of additional sampling and analysis of soils, sediments and groundwater to inform on-site management and disposal of contaminated water.

2. **Appropriate management and mitigation measures**, including, but not limited to:
   (a) in-water management measures to limit the disturbance and dispersion of potentially contaminated sediment (e.g. silt curtains, sheet piling)
   (b) enhanced erosion control measures to minimise disturbance of contaminated soils
   (c) a **Construction Surface and Groundwater Quality Monitoring Program** which includes but is not limited to:
      i. water quality monitoring locations (including marine waters and any groundwater trenches)
      ii. analyte list and sampling frequency for each monitoring location
         a. sampling method for each location
         b. the method of analysis (as per the *Approved Methods for Sampling and Analysis of Water Pollutants in NSW*) and the practical quantification limit
      iii. timing and frequency information for sampling. Sampling should be carried out with a frequency commensurate with the risk and stage of operation.

3. Clarification of whether contaminated groundwater is to be irrigated to land. If it is, the proponent should provide an assessment of the potential impact to soils and human health is conducted to inform appropriate mitigation and management measures. This must include comparison of any contaminant levels against the relevant environmental and human health guidelines e.g. *Environmental Guidelines: Use of Effluent by Irrigation* (DECC 2004).

4. A **Trigger Action Response Plan (TARP)** to identify and manage any unpredicted impacts and their consequences to ensure corrective actions are implemented, including contingency options for management of contaminated water (e.g. tankering offsite for disposal at a licensed facility).

## 3. Contamination

The EIS and the supporting TSI and PSI reports have not satisfactorily addressed the requirements of the SEARs as the nature and extent of contamination have not been fully assessed. Furthermore, the reports do not identify mitigation and management measures to safeguard the environment and people during construction and operation.

The proponent's TSI report included sampling of soil and sediments, however, groundwater was not assessed. Contaminants of potential concern that were identified, such as total recoverable hydrocarbons, polycyclic aromatic hydrocarbons, and chlorinated hydrocarbons in soil and sediment samples were either below the limits of reporting (LOR) or less than the adopted screening criteria. Per and Polyfluoroalkyl Substance (PFAS) in soil in the La Perouse site were identified above the LOR, albeit below the screening criteria. However, **PFAS in groundwater and surface water will need to be assessed**.

The Sampling and Analysis Quality Plan (SAQP) referenced in the TSI was not submitted as part of the EIS and it is therefore not possible to determine if sampling during the targeted site investigation was undertaken in accordance with the SAQP. **The SAQP must be submitted as part of the RtS**.

The TSI identified unexploded ordnance (UXO) as a potential hazard in areas to the east of the project site at La Perouse. The EPA flags that this was not assessed by a qualified UXO expert and would require further investigation as a safety hazard if there is a change to the project footprint.

**The EPA recommends that Detailed Site Investigations (DSI) be undertaken** to investigate the nature and extent of contamination in the soil, groundwater, surface water and sediments and to adequately inform what management measures or remediation would be required to safeguard the environment and people during construction and operation of the proposed wharves at La Perouse and Kurnell. This may include the preparation of a **Remedial Action Plan** (RAP) to address contamination and ensure the site can be made suitable for the proposed use.

The DSI and any subsequent report/s, must:

(a) be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme; and
(b) be prepared in accordance with the relevant guidelines made or approved by the EPA under section 105 of the *Contaminated Land Management Act 1997*.

The EPA notes the proponent's commitment to the **preparation and implementation of a Soil and Water Management Plan and recommends this be included as a condition of approval.** The plan should detail measures to manage potential PFAS, Acid Sulphate Soils, asbestos finds, and any other contamination identified. An unexpected finds protocol should also be prepared and implemented during construction.

**The EPA recommends that a NSW EPA-accredited Site Auditor is engaged throughout the duration of works** for this project to ensure that any work required in relation to contamination is appropriately managed, including any unexpected contamination finds, so that there is confidence that the site would be suitable for the proposed use.

**The following infromatiion is required for the EPA to adequately assess the environmental impact of the proposal:**

1. a copy of the SAQP referenced in the Targeted Site Investigation report;
2. measures to manage acid sulphate soils, contamination (including, but not limited, to asbestos and PFAS) in sediments, soil, and groundwater;
3. interim audit advice from an EPA-accredited site auditor commenting on the nature and extent of the contamination and the adequacy of the Sampling and Analysis Quality Plan; and
4. a DSI.