DOC22/1095258 12 December 2022

Keith Ng
Team Leader
Transport Assessments
Department of Planning and Environment

(via Major Projects Planning Portal)

Dear Keith

Parramatta Light Rail – Stage 2 (SSI 10035)
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 Stage 2 of the Parramatta Light Rail (PLR2) project involves the construction of approximately 10 kilometres of light rail infrastructure between Camellia and the Carter Street precinct adjacent to Sydney Olympic Park. Approximately 3 kilometres between the Paramatta CBD and the Carter Street precinct has been constructed as part of PLR Stage 1 resulting in 13 kilometres of new operational rail for PLR2. The project comprises:

- dual light rail track with 14 stops;
- two bridges over the Parramatta River – between Camellia and Rydalmere, and between Melrose Park and Wentworth Point – the latter to include bus access;
- a bridge over Silverwater Road between Rydalmere and Ermington;
- other bridge works in Ken Newman Park and Sydney Olympic Park;
- approximately 8.5 kilometres of new active transport links between Camellia and the Carter Street precinct;
- interchanges with other public transport including trains, ferries, buses and Sydney Metro West. Key interchanges include Parramatta CBD, Rydalmere and Sydney Olympic Park;
- turnback facilities including on part of Macquarie Street, Parramatta;
- adjustments to the PLR1 stabling and maintenance facility at Camellia;
- 5 x new traction power stations to convert electricity to a form suitable for use by light rail vehicles;
- new and improved open spaces and recreation facilities at Ken Newman Park, the Atkins Road Stop and Archer Park

Under Clause 10 of the *Protection of the Environment Operations (General) Regulation 2022*, the EPA is the Appropriate Regulatory Authority (ARA) for the construction and operation of light rail infrastructure.

Additionally, based on the information provided, the proposal will require an environment protection licence (EPL) in accordance with clause 33 of Schedule 1 in *the Protection of the Environment Operations Act 1997* (POEO Act) for Railway activities – railway infrastructure construction. Under clause 33, an activity requires a licence for construction of railway infrastructure (including the

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widening or rerouting of existing railway infrastructure) and any related tunnels, earthworks and cuttings, that are 3 kilometres or more in length in the metropolitan area.

The EPA has reviewed the following relevant documents:

- *Parramatta Light Rail Stage 2 – Environmental Impact Statement*, dated November 2022, **(EIS)**
- Technical Paper 3 – *Noise and Vibration*, final, dated 25 October 2022 prepared by GHD **(NVIA)**
- Technical Paper 10 – *Hydrology, Flooding and Water Quality Assessment*, final, dated 28 October 2022, prepared by Mott Macdonald **(WQIA)**

The EPA provides comment on noise and vibration, surface water quality, contamination and air quality at **Appendix A** and requests that additional information is provided as part of the Response to Submissions.

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

STEVEN TAN
A/ Unit Head
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APPENDIX A

1. Noise and Vibration

The EPA has reviewed the NVIA and makes a range of comments below.

The EPA notes the proposed project hours of 7 am to 7 pm, 7 days per week are outside the standard working hours identified in the *Interim Construction Noise Guideline* (DECC, 2009) (ICNG). Specifically, on weekdays the project proposes an extra hour in the evening (6 pm to 7 pm), an additional seven hours on Saturdays (between 7 am and 8 am, and from 1 pm to 7 pm) and a 12-hour workday on Sundays/public holidays when the ICNG recommends that no works should occur.

The EPA has considered the outcomes of community and stakeholder engagement contained in the EIS. These outcomes identified a community preference to avoid evening and night works.

Transport for NSW has also engaged directly with the EPA and DPE to present community survey findings. These surveys indicate some degree of community support for proposed additional hours on weekdays and Saturdays, with a less positive reception for Sundays and public holidays.

The EPA notes that areas such as Melrose Park, Ermington and Rydalmere have not experienced long-term infrastructure construction works, and that based on initial consultation those areas are also not supportive of Sundays and public holidays.

While the EPA is satisfied that significant consultation has been undertaken, it remains concerned about how noise impacts from the proposed extended work hours would be managed, as this is deferred to detailed design.

In the absence of detailed design significant information that is relevant to the assessment of the proposed extended hours is unknown including:

- in what circumstances specific reasonable and feasible mitigation measures would apply;
- how effective mitigation measures would be once applied;
- how any residual impacts would be managed; and
- a lack of clarity about the duration of impacts for a receiver or group of receivers

Based on the absence of detailed design to inform expected noise impacts and the lack of detail about expected noise impacts that can be provided to the community, at this stage the EPA is unable to support a 7-day week work regime that offers only limited respite on one Sunday per month. The EPA currently recommend standard hours of construction in accordance with the ICNG.

While the EPA recommends standard hours of construction, works outside these hours and within ‘project hours’ could be undertaken subject to detailed assessments of impacts once construction work packages are confirmed, and contracts are awarded and can be dealt within the environment protection licence framework.

As such, **the EPA recommends the proponent, or its contractor, be required to prepare and submit a Detailed Noise and Vibration Impact Assessment based on detailed design** that:

a) identifies work programme schedules;
b) details the noise and vibration impacts associated with those work programmes;
c) outlines what works are proposed to be undertaken during the ‘project hours’ that are outside the ‘standard hours’ identified in the ICNG;
d) identifies what reasonable and feasible mitigation measures will be applied to ensure projects meet Noise Management Levels (NMLs);

e) identifies what the residual impacts of works that do not meet the NMLs and provide justification for why such works cannot be done during standard construction hours;
f) if there are any exceedances of NMLs outside of the standard construction hours, the proponent must demonstrate community agreement by a significant majority of affected receivers; and
g) is made available during community consultation.

The requirement for contract/package-based **Detailed Noise and Vibration Impact Assessment** could be included either as a stand-alone condition, or as part of the 'Variation to Work Hours' condition.

2. Water Quality

The water quality assessment undertaken in Technical Report 10 adequately identifies and assesses the key water quality risks associated with the project. They include the exposure of acid sulfate soils, contaminated soils and mobilisation of sediment during in-stream construction.

In general, appropriate mitigation measures have been proposed for the management of these risks. It is noted that an acid sulfate soil management plan will be developed in accordance with the *Acid Sulfate Soils Assessment Guidelines* (ASSMAC, 1998).

The EPA recommends that a Soil and Water Management Plan (SWMP) be prepared and implemented as part of the Construction Environmental Management Plan (CEMP). The SWMP should include:

- specifications and design details of the mitigation measures for in-channel sediment disturbance associated with bridge construction activities and contingency actions for risk factors; and
- soil erosion and sediment control measures appropriate for contaminated land that ensure stormwater from contaminated areas are not permitted to contaminate clean areas or discharge to waters

The EPA recommends that the SWMP includes a Water Quality Monitoring Programme (WQMP) to monitor the potential impacts of in-channel construction activities. This should include a Trigger Action Response Plan (TARP) for sediment and contaminant monitoring of the waterway, including a contingency plan for any sediment or contaminant levels that exceed specified maximum levels in the TARP.

The following condition is recommended:

> Unless an EPL is in force in respect to the project and that licence specifies alternative criteria, discharges to surface waters must not exceed:
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> - the relevant physical and chemical stressors guideline values set out in Tables 3.3.2 and 3.3.3 of the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC 2000)
> - the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZG, 2018) default guideline values for toxicants at the 95 per cent species protection level
> - for bioaccumulative and persistent toxicants, the ANZG (2018) guidelines values at a minimum of 99 per cent species protection level
>
> Where the ANZG (2018) does not provide a default guideline value for a particular pollutant, the approaches set out in the ANZG (2018) for deriving guideline values, using interim guideline values and/or using other lines of evidence such as scientific literature or international water quality guidelines, must be used to derive a guideline value.

3. Contamination

Chapter 18 of the EIS identifies the potential for contamination at Camellia, Parramatta River, Wentworth Point, and Sydney Olympic Park, with potential sources of contamination coming from historic industrial and landfilling activities.

The proposed development crosses multiple contaminated sites which are regulated by the EPA under the *Contaminated Land Management Act* 1997 (CLM Act). It is important to ensure the works will be undertaken lawfully and do not result in the release of contamination into the greater environment, damage to existing remediation systems, or result in unacceptable contaminant exposure risks to the community and environment.

The light rail alignment is proximate to the Melrose Park development area (former Reckitt Benckiser and Pfizer sites) which is known contaminated land. The EPA determined this site was not significant enough to warrant regulation under the CLM Act with the understanding that the contamination would be remediated when the site was developed under the planning framework. The proposed light rail development needs to be mindful of this site which may or may not have been already remediated.

The alignment also intersects Haslam's Reach landfill and possibly other landfills located within Sydney Olympic Park. The following permissions and consents will need to be considered if excavating into landfills:

a) Under Section 110A of the *Protection of the Environment Operations Waste Regulation 2014*, the proponent must obtain written consent from the EPA prior to any exhumation of waste from landfill sites.
b) Certain landfills located in Sydney Olympic Park are regulated by the EPA under the *Contaminated Land Management Act 1997* through an Ongoing Maintenance Order issued to the Sydney Olympic Park Authority (SOPA). Under the Order, SOPA is required to obtain written consent from the EPA prior to undertaking excavations meeting a certain depth and area.

The proposed development presents a potential risk of damaging the landfills and leachate management infrastructure which services the Sydney Olympic Park landfills. These include remediated and engineered subsurface landforms, sub-surface drainage lines, pump pits, control boxes, piezometers, bores and so forth which appear to be located within the development footprint. Project interface with landfills and associated infrastructure must be managed appropriately to prevent damage to infrastructure, minimise risks to workers and the surrounding environment in exposure to contaminated leachate, hazardous ground gas, or soil contamination. The works must be designed to minimise the potential for a pollution event, and ensure infrastructure is reinstated to original condition. **The EPA recommends dilapidation surveys of landfill and landfill infrastructure to assist with reinstatement works**.

The EPA recommends that an EPA-accredited site auditor be engaged for the duration of construction works to audit contamination investigations, remediation and validation work, and to issue a Section A Site Audit Statement and Report at completion of work, stating suitability of the land for the intended uses.

Chapter 18 states: *"further contamination investigation across the project site is currently underway, and will provide more information on contaminants present, their concentration in soil and groundwater, and their coverage across the project site. These additional sampling results would be used to inform further actions and decisions in relation to the need for remediation of areas and the approach to mitigation."* **The EPA requests that the additional information be provided as part of the Response to Submissions**.

4. Air Quality

The EPA notes the commitment in the EIS to the preparation of an Air Quality Management Plan to include measures to minimise the potential for air quality impacts on the local community and environment.

The EPA recommends that an Air Quality Management Plan be prepared and implemented as part of the CEMP.