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SSI 8285

Mr James Sellwood
Senior Planning Officer
Transport Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: James Sellwood

Dear Mr Sellwood

**RE: EIS PARRAMATTA LIGHT RAIL STAGE 1 WESTMEAD TO CARLINGFORD via
PARRAMATTA AND CAMELLIA - REQUEST FOR EPA COMMENT**

I refer to the request from the Department of Planning and Environment (DP&E) to the Environment Protection Authority (EPA) dated 22 August 2017 to undertake a review of the Environmental Impact Statement (EIS) for the Parramatta Light Rail Stage 1.

The EPA has reviewed the EIS and has provided comments in Attachment 1. The comments outline the EPA's concerns regarding certain aspects of the EIS. The EPA also takes this opportunity to request that any proposed conditions of consent are provided for review and comment prior to determination.

If you have any questions regarding this letter, please contact Peter Morrall on 9995 6810 or peter.morrall@epa.nsw.gov.au.

Kind regards,

A handwritten signature in purple ink, appearing to read 'Claire Miles'.

28/09/2017

CLAIRE MILES
A/Unit Head Metropolitan Infrastructure
NSW Environment Protection Authority

Attachment 1

Contaminated Land

1. The EIS Section 10.7.1 identifies contamination at several locations underlying the Stage 1 corridor, listing several sites either notified to the EPA, or regulated by the EPA under the *Contaminated Land Management Act 1997 (CLM Act)*. These locations are identified in Table 10.27 of the EIS. Table 10.27 also identifies locations with a status of 'Regulation Not Required'.

Recommendations:

- a. The proponent should further consider the potential for the presence of contamination at sites which are present within the proposal footprint which are not subject to regulation. Even if a site is identified as '*Regulation Not Required under the CLM Act*' as identified in EIS Table 10.27, this does not preclude the presence of contamination or associated risks present at these sites.
 - b. The corridor intersects large urbanised areas in Sydney which have a history of contaminating activities. The EPA notes that the EIS discusses the presence of asbestos at several locations identified in the NSW EPA (2012) report, where James Hardie Industries may have disposed of asbestos containing materials across locations within Parramatta LGA. It is also noted that the EIS outlines several Sydney Trains investigations which have identified other sites with known contamination, and the presence of a former gasworks in Parramatta nears Queens Wharf. While it is positive that these areas have also been identified as areas of concern, there could potentially be other unidentified contaminated sites across the footprint, and an unknown finds protocol must be included as part of the proposal.
 - c. The proponent must discuss and/or seek approval from EPA for any work proposed within the Stage 1 corridor which intersects, or impacts on, sites subject to regulation under the *CLM Act*.
 - d. The proponent must consult with the EPA for any work proposed within the Stage 1 corridor which intersects sites notified to the EPA and under assessment, or where the EPA is finalising regulation.
2. Section 10.7.4 of the EIS (WSP, 2017) and Table 7 and Section 5 of Technical Paper Number 8 (Coffey, 2017) describes management and mitigation of contamination within the corridor, having identified up to 48 areas of environmental concern (AECs) which have been assigned a low, medium or high risk category, assessed on inherent risk of impact within the disturbance footprint.

Recommendations:

- a. The EIS should substantiate and show calculations of how the presented risk ratings as per Table 7 of Technical Paper 8, were derived. The EPA notes Appendix D of the Technical Paper discusses risk ranking at Camellia only, but no clear calculations were provided. The proposal should update the risk ratings once more data is collected (such as from the cited Phase 2 DSI reported as being in progress) considering factors such as proximity to sensitive land use and receptors, and potential risk to on site and off site receptors.
- b. Table 8 of the Technical Paper Number 8 (Coffey, 2017) presents mitigation and management measures based on the assessment risk from contamination. Area of Environmental Interest AEI 23 (Sandown Line, including 27 Grand Avenue, Camellia) is the only area identified high risk due to the presence of asbestos. The EPA considers other high risk areas should be identified due to the presence of significant

quantities of buried asbestos within Camellia peninsula, and questions why these have not been identified as high risk.

- c. Section 6 of the Technical Paper Number 8 (Coffey, 2017) discusses principles for further contamination assessment and remediation. Discussion is presented for potential management of contaminated soils with reference to NSW DECCW Guidelines for the NSW Site Auditor Scheme (DECCW 2006). This is a very limited discussion. Given there is contaminated groundwater underlying the footprint (particularly in Camellia), the proponent must also consider clean up to the extent practicable measures, and management of contaminated groundwater to meet national and EPA endorsed guidelines. The proponent should also have regard for contamination management with respect to ecologically sustainable development, and given proximity to the Parramatta River, potential for sea level fluctuations.
3. Section 17.5, Table 17.2 of the EIS presents mitigation and management measures to be implemented during detailed design of the project. Several AEI have been identified for further desktop risk assessment to confirm medium, or high risk. These include but are not limited to the Former James Hardie Property at 181 James Ruse Drive, Rosehill and 1 Grand Avenue, Rosehill (AEI 21 and AEI 22), 6 Grand Avenue, Rosehill (former Akzo Nobel site) (AEI 27), Former gas works at Queens Wharf Reserve (AEI 15), 13A Grand Avenue, Camellia (AEI 21). CLM notes AEI 23 is not mentioned here even as it had a preliminary high risk rating and recommends it is included.

4. **General Recommendations:**

- a. The proponent must follow EPA endorsed guidance to assess, manage and report potentially contaminated land, beyond the two references listed. Please refer to the guidelines at <http://www.epa.nsw.gov.au/clm/guidelines.htm>.
- b. Waste generated or stored at the site should be disposed to a NSW EPA licensed landfill that is licensed to receive the waste as classified in accordance with the EPA's Waste Classification Guidelines Part 1: Classifying Waste (See www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm);
- c. All waste transported from the site that is required by the *Protection of the Environment (Waste) Regulation 2005* to be tracked, must be tracked using the EPA's on-line tracking system or an alternative tracking system approved in writing by the EPA (See www.epa.nsw.gov.au/owt/aboutowt.htm).
- d. Given the breadth of the project area and the multiple identified and potential contaminated sites within the project footprint, it is recommended that a site auditor accredited under the *Contaminated Land Management Act 1997* be engaged to endorse the contamination assessment and remediation through a staged approach as per the *National Environment Protection Measure (Assessment of Site Contamination)*, updated 2013. The site auditor should be engaged to provide a Site Audit Statements at completion of the remediation works to confirm works have been completed appropriately and that the land is suitable for its intended use.

Noise

1. The EPA believes that the proponent has not provided in the EIS adequate justification in accordance with 2.3 of the Interim Construction Noise Guideline, for construction work proposed outside standard hours. Any approval should limit construction to standard hours, based on the information provided.

The proponent is proposing construction hours that include time outside the recommended standard hours in the Interim Construction Noise Guideline (ICNG). The proponent states that an

Out of Hours Works protocol will be produced, which will include justification of outside standard hours works. Section 2.3 of the ICNG outlines works that a proponent might undertake outside recommended standard hours, which includes where a proponent demonstrates and justifies a need. The proponent needs to provide clear justification, for reasons other than convenience.

2. The Parramatta Light Rail construction noise and vibration management plan proposed by the proponent should be included as a condition or conditions of any approval, to be implemented to minimise the likely construction noise and vibration impacts of the project.

The proponent must commit to implementing all feasible and reasonable noise mitigation measures to minimise impacts associated with construction noise and vibration that exceeds the noise management levels, in accordance with a construction noise and vibration management plan. The commitment should be confirmed with appropriate conditions in any approval.

3. The proponent's proposed operational mitigation strategy and compliance assessment should be included as a condition of any approval.

There is potential for operational noise and vibration impacts (including groundborne) from the Parramatta Light Rail and it is appropriate that there is further consideration of mitigation during detailed design. The proponent's proposed operational mitigation strategy and compliance assessment should be included as a condition of any approval, to ensure appropriate outcomes.

Water Quality

Site Specific Trigger Values

The EIS proposes that site specific trigger values (SSTVs) would be developed as part of the Environmental Management Plan. SSTVs would be based on the primary water management goal for the project which is to not worsen the existing condition of surface water and groundwater within the project area.

The EIS states that *"Given the present degraded state of surface waters, water quality criteria during construction and operation should be aligned closely with the baseline water quality as opposed to the aspirational ANZECC/ARMCANZ (2000) targets which are already unachievable for the waters across the project"*.

The EPA policy is that water pollution should first be avoided. Where discharges that cause water pollution cannot be avoided the NSW Water Quality Objectives and ANZECC Guidelines framework are used to assess potential pollution impacts to surface water and groundwater. If the impacts are unacceptable, mitigation measure to prevent or minimise impacts should be considered. In a highly disturbed waterway, a reduced level of protection may be appropriate as a pragmatic short-term goal, with the aim of eventually restoring it to the status of 'slightly to moderately disturbed'. However, it is not acceptable to allow poor environmental management or water pollution simply because a waterway is currently degraded.

The approach adopted in the EIS is inconsistent with:

1. the ANZECC (2000) Guidelines methodology for deriving site-specific trigger values
 2. NSW Government policy regarding the NSW Water Quality Objectives
 3. policies and principles in the National Water Quality Management Strategy.
1. The ANZECC (2000) Guidelines provide a methodology for deriving site-specific trigger values, including identification of a suitable reference site and the collection of 24 months of contiguous data. If appropriate data is available to derive site-specific trigger values consistent with the

ANZECC (2000) guidelines and an agreed suitable reference site is available, then site-specific trigger values are preferred over the default trigger values for physical and chemical stressors.

Toxicants are usually compared with a single default trigger value and less commonly with a background or reference distribution as the default values are prepared by analysis of a comprehensive set of available ecotoxicological data. For naturally occurring metals and some non-metallic inorganics, however, site specific trigger values can be developed using a similar methodology to the physical and chemical stressors.

2. The NSW WQOs are the environmental values and long-term goals for consideration when assessing and managing the likely impact of activities on waterways. The guiding principles are:
 - where the environmental values are being achieved in a waterway, they should be protected
 - where the environmental values are not being achieved, all activities should work towards their achievement overtime.

While the EIS identifies the relevant Water Quality Objectives for the receiving waters, an assessment of the impacts on those Water Quality Objectives is not provided. It should also be noted that following section 45(f1) of the POEO Act, EPA is required to take the environmental values of receiving waters into consideration in its licensing decisions.

3. All States and Territories have adopted the National Water Quality Management Strategy (NWQMS) for managing water quality. The central technical reference document within the NWQMS is the ANZECC (2000) Guidelines. While it is understood that the proposed works are near highly disturbed waterways, the ANZECC (2000) Guidelines recommend that *“guideline trigger values for slightly–moderately disturbed systems also be applied to highly disturbed ecosystems wherever possible”*. The Guidelines state that: *“the aim is to eventually restore highly disturbed systems to a slightly to moderately disturbed condition”*, and that: *“It is not acceptable to allow poor environmental performance or water pollution, simply because a water way is degraded”*.

Additionally, the EPA notes the EIS proposes that during construction any water collected from the worksites will be treated and discharged in accordance with The Blue Book – Managing Urban Stormwater (Landcom, 2004) and the Transport for NSW Water Discharge and Reuse Guidelines. The practices and principles in the Blue Book are only appropriate for uncontaminated sediment and the EPA also notes that the Water Discharge and Reuse Guidelines only considers a limited range of potential pollutants.

While it is unclear at this stage whether the proponent will discharge to receiving waters, the EPA recommends a Condition of Consent requiring that an appropriate impact assessment is conducted prior to any discharge, including:

- *Identification and estimation of the quality and quantity of all pollutants that may be introduced by source and discharge point, including residual discharges after mitigation measures are implemented;*
- *Assessment of the significance of any identified impacts including consideration of the relevant ambient water quality outcomes. Demonstration of how the proposal will be designed and operated to:*
 - *protect the WQOs for receiving waters where they are currently being achieved; and*
 - *contribute towards achievement of the WQOs over time where they are not currently being achieved.*

Disturbance of contaminated land

The EIS states that a number of areas of contaminated land have been identified along the project alignment that will be disturbed during construction. If not properly managed, this could impact the receiving environment. Further site investigation will be carried out in areas of high risk to identify appropriate management responses.

The EPA recommends a Condition of Consent requiring that as part of a Soil and Water Management Plan the applicant should:

- *include 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.*

Bridge construction and modification

The EPA notes that no commitment was made on the proposed mitigation measures for in-channel sediment disturbance associated with bridge construction/modification activities.

The EIS proposes that through the soil and water management sub-plan adequate water quality control measures will be developed and implemented prior to the carrying out of significant earthwork or bridge construction activities. The objective is to minimise and manage impacts on water quality and downstream receiving environments during instream activities. The adequacy of the mitigation measures in protecting water quality associated with bridge construction activities should be reviewed by the EPA.

The EPA recommends a Condition of Consent requiring that as part of a Soil and Water Management Plan the applicant should:

- *include specifications and design details of the mitigation measures for in-channel sediment disturbance associated with bridge construction/modification activities and contingency actions for risk factors.*

Issue Requiring Clarification

Stabling and maintenance facility

A stabling and maintenance facility will be located in Camellia. Key elements include:

- an automatic train wash plant and sanding plant for replenishing LRV
- maintenance and repair facilities
- water detention basin(s)

The site chosen is currently notified under the *Contaminated Land Management Act 1997*. Soils and groundwater at the site are known to contain hexavalent chromium, volatile chlorinated hydrocarbons and asbestos due to historical industrial activities.

To accommodate the development of the stabling and maintenance facility, and reduce the potential for interaction with contaminated material during construction, the finished level of the stabling and maintenance site would be raised by about two metres. This would be achieved through the placement of appropriate fill material across the site to raise the existing level. The subsurface remediation is subject to a separate environmental assessment and approvals process.

The EIS states that two water quality basins (3000m² total surface area for the 2 basins) will be located at the facility. No information is provided on the purpose of these basins (i.e. what water is captured), the sizing of the basins or how the water in the basins will be managed (i.e. treatment, reuse of water and/or disposal). There is also potential for the water quality basins to be impacted by the remaining contaminated soil and/or groundwater onsite.

The EPA recommends DPE seek clarification on the design, operation and management of the proposed water quality basin at the stabling and maintenance facility. Information should also be sought to demonstrate that the water in the water quality basins will not be impacted by any contaminated soil or groundwater on site.