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Our reference: DOC12/39276
Contact: Sarah Deards, 9995 6816

Tracy Bellamy
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GPO Box 39
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Dear Ms Bellamy

I refer to the letter from the Department of Planning and Infrastructure dated 17 September 2012 inviting the NSW Environment Protection Authority (EPA) to provide comments regarding the public exhibition of the Epping to Thornleigh Third Track Project Environmental Impact Statement (EIS).

The EPA has reviewed the EIS and detailed comments are provided in Attachment 1. The comments outline the EPA's concerns regarding the key issues of noise and vibration; soils and water; cumulative impacts; and environmental management and mitigation. The EPA considers further assessment is required and this should be addressed in the submissions report. Accordingly the EPA has provided recommendations regarding a number of issues that should be included as Conditions of Approval, but is not able to provide a comprehensive list of recommended Conditions at this point. The EPA would therefore appreciate the opportunity to provide comment on the Submissions Report and any draft conditions of approval for the project.

If you wish to discuss any of the issues raised in this letter, please contact Sarah Deards on 9995 6816.

Yours sincerely

G Howard 5/11/12

GISELLE HOWARD
Director Metropolitan
Environment Protection Authority

Attachment 1: The EPA's comments regarding the Epping to Thornleigh Third Track EIS

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Environment Protection Licence

The Epping to Thornleigh Third Track (ETTT) project constitutes 'Railway Systems Activities,' as described in clause 33 of Schedule 1 of the *Protection of the Environment Operations (POEO) Act 1997*. In accordance with clause 48 of the POEO Act, an Environment Protection Licence (EPL) is required prior to undertaking any scheduled activities or scheduled development work.

Information regarding licensing and relevant application forms can be found on the EPA website (<http://www.environment.nsw.gov.au/licensing/licencePOEO.htm>).

Noise and Vibration

The comments below relate to the Environmental Noise and Vibration Impact Assessment (ENVIA) technical paper as well as Chapter 9 of the EIS document.

Residential receivers

- The EPA has identified two residential receivers within NC01 that would be impacted by both construction and operational noise from the proposal but have not been included in the ENVIA. The receivers are located at the corner of Carlingford Road and Beecroft Road (Down side of track); and 'The Oxford' at the corner of Oxford Street and Cambridge Street (Up side of track). The EPA considers that the ENVIA should be updated to include assessment of noise impacts at these receivers.

Operational noise

- Ambient noise monitoring was undertaken at locations L1 to L4, whereas noise monitoring for source noise levels was undertaken at four different locations (N1 to N4). Clarification as to why the monitoring was undertaken at different locations for the ambient and source noise levels should be provided in the Submissions Report.
- It is not clear in the ENVIA how the NGARA data for freight noise measurements was utilised (for example, whether data was extracted from only one location to represent freight train noise along the entire length of the project). Clarification should be provided in the Submissions Report.
- Section 3.3 of IGANRIP states that a noise assessment should include an estimate of operating conditions, including train horns. However Section 4.1 of the ENVIA states that horn noise was not considered in the ENVIA as horns are a safety critical device that is exempt from assessment criteria. This issue should be addressed in the Submissions Report, which should include (at a minimum) a qualitative assessment of horn noise from the project, for example existing and future locations where horns may be sounded relative to sensitive receivers.
- The EPA is concerned that the train numbers used to predict project noise impacts during the future scenarios are uncertain and may result in predictions in the ENVIA being unrepresentative of actual future levels. For example, the passenger train numbers indicated in Table 17 of the ENVIA have little or no difference between the build and no build scenarios and between 2016 and 2026. Also, there is little or no difference between the number of freight trains in the "Prior to Opening Year 2016" scenario and the "Future Year 2026 Without Project" scenario. It is noted in the ENVIA that Railcorp is unable to confirm the 2026 passenger train numbers due to uncertainty around infrastructure and designs. The EPA notes that monitoring is planned to be undertaken three months after commencement of project operation. The EPA recommends that the Conditions of Approval require this compliance assessment to also include confirmation of train numbers, measured noise levels and a reassessment of the predicted 2026 train numbers.

- Section 4.8 of the ENVIA states that the model includes a number of assumptions, however details of the assumptions are not provided. Assumption details should be provided in the Submissions Report.
- IGANRIP requires predicted noise levels to be reported separately for passenger and freight trains, however the predicted noise levels in Section 4.9 are cumulative only. The ENVIA has also not included an indication of the 'increase' component, as required by IGANRIP. These issues should be addressed in the Submissions Report.
- The ENVIA does not contain predicted noise levels for braking and bunching noise, only a discussion of possible impacts. The EPA considers that this should be addressed in the Submissions Report, and should include predicted noise levels as well as any mitigation measures that are feasible and reasonable to implement.
- The Columns in Appendix F of the ENVIA appear to be mislabelled because the levels are higher for the "no build" option compared with the "build" option.
- Section 9.3.3 of the EIS states that the finalised operational plan should identify specific requirements for freight trains stopping or idling at the new signal location and that the need for additional mitigation would also be considered during the detailed design phase. The EPA recommends that the Conditions of Approval contain a requirement that additional feasible and reasonable mitigation measures for operational noise be considered during the detailed design phase (including impacts from idling freight trains at signals).
- Section 9.3.3 of the EIS states that it is not practical to predict noise from the public address (PA) system at Cheltenham Station at this stage of the project. The EPA notes that the EIS states that the PA system will be designed in order to meet the requirements of the Industrial Noise Policy, however the EPA recommends a Condition of Approval requiring the PA system to be designed and installed in accordance with best practice for PA systems in order to minimise impacts to surrounding sensitive receivers while achieving its operational objectives.
- The project DGRs require the operational noise assessment to consider relevant components of the Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (IGANRIP). Section 3.3 of IGANRIP outlines the requirements for a noise and vibration assessment, including proposing and selecting noise mitigation measures, then providing a revised noise assessment based on those measures. Although the EIS identifies a number of shortlisted mitigation measures, no commitments have been made to specific mitigation measures with regard to operational noise, and operational noise impacts have not been recalculated. Whilst the EPA acknowledges the constraints of committing to specific reasonable and feasible noise mitigation measures prior to the project design being finalised, at a minimum, the proponent should make a commitment in the EIS to achieving specific noise levels to ensure appropriate noise outcomes are achieved for the community.

Construction noise

- Appendix B of the ENVIA includes only one 24-hour logger graph for each measurement location, which is not adequate to enable the EPA to undertake a proper review of this information. Despite this lack of data, it appears from each of the graphs that the rating background levels (RBLs) noted in Table 6 are higher than if calculated using the logger graphs (particularly at L3 where the graph indicates an RBL of 30 dB(A) and the Table indicates an RBL of 38 dB(A)). The EPA considers that this requires clarification in the Submissions Report, which should include provision of the RBLs.
- In the EPA's letter to the Department of Planning and Infrastructure regarding the adequacy review of the EIS, the EPA raised concerns regarding the lack of assessment of noise impacts from construction traffic. This issue has still not been addressed in the current version of the EIS and an assessment of the potential impact of construction traffic noise is therefore required, together with a discussion of potential mitigation and management measures. The EPA considers that construction traffic

movements should be restricted to within standard construction hours, to reduce the potential for sleep disturbance as much as possible (except as provided below).

- The EIS indicates that blasting may be required during construction. The EPA recommends that the Conditions of Approval include a requirement to undertake an assessment of the potential noise and vibration impacts should blasting be required.

Construction hours

Construction noise levels are predicted to be well above the noise management levels derived using the Interim Construction Noise Guideline (ICNG) in many instances. The EPA recommends that standard construction hours should apply to the project approval, with separate approval to be sought from the EPA for any out of hours works through the Environment Protection Licence for the project.

Construction vibration

- The EPA notes that the EIS has nominated safe working distances for vibration during construction works, rather than predicted vibration dose values in accordance with *Assessing Vibration: a technical guideline*. In order to ensure that the proponent minimises construction vibration impacts to sensitive receivers the EPA recommends that the Conditions of Approval for the project contain a requirement to prepare a Noise and Vibration Management Plan prior to any works being undertaken which contains specific reasonable and feasible measures to minimise vibration impacts on sensitive receivers.

Soils and Water

Offsite disposal of spoil

- The project DGRs require the EIS to quantify the spoil balance and the management and disposal of excess spoil and waste. The EIS indicates that 65000m³ of spoil will require offsite disposal following waste classification. The EPA recommends that reuse options at offsite locations should be investigated, prior to disposing of excess spoil material to landfill, in accordance with the waste hierarchy established under the *Waste and Resource Recovery Act 2001*.

Groundwater

- The EIS states that groundwater was found to contain a number of contaminants, but that further investigation would be required to determine the source of the contaminants. The EIS also states that dewatering would be required during construction works, but does not identify the potential for contaminated groundwater to impact on surface water in the 'potential impacts' section of the EIS. In addition, the EIS states that groundwater would be managed in accordance with the Waste Classification Guidelines and Transport for NSW Water Discharge and Reuse Guideline, but has not identified any preferred groundwater disposal options, including whether groundwater may be discharged to local waterways. The EPA considers that additional information regarding groundwater discharge during construction, including treatment options if required, should be provided in the Submissions Report to enable an adequate assessment of possible surface water impacts.

Surface water

- The EPA's letter regarding the adequacy review of the EIS identified concerns regarding management of 'dirty water' from the site during construction, particularly regarding methods for capture, treatment and discharge of water. This issue has not been rectified in the EIS on exhibition and the EPA considers that management of 'dirty water' should be addressed in the Submissions Report.

Land contamination

- The EPA's letter regarding the adequacy review of the EIS detailed the EPA's concern that the EIS did not contain adequate detail regarding the contamination investigations undertaken which meant that the EPA was unable to determine the adequacy of the contamination investigations. The EIS placed on exhibition has not addressed these issues. The EPA requests that this issue is addressed within the Submissions Report, particularly with regard to whether the contamination assessment was prepared in accordance with guidelines made under the *Contaminated Land Management Act 1997*.
- Section 15.5.1 of the EIS states that additional contamination investigations are required to delineate areas of contamination. The EPA considers that the DGR relating to land contamination has not been adequately met as investigations have not been adequate to enable identification of the need for management or remediation of any contaminated areas.

Cumulative Impacts

- Cumulative impacts associated with construction traffic noise have not been adequately considered in the EIS. Cumulative impacts associated with traffic have only been considered in terms of impacts on local traffic roads and intersection performance. The EPA recommends that this issue should be addressed in the Submissions Report, particularly with respect to traffic impacts in the area surrounding the ETTT construction compound near the former bus flyover to the south of the M2 motorway.
- The EPA recommends that the location of the ETTT construction compound near the former bus flyover to the south of the M2 be reconsidered due to the potential cumulative impacts on the surrounding community associated with the North West Rail Link Epping Services Facility (ESF). Section 18.2.2 of the EIS states that the ETTT compound would be 600 metres from the ESF compound, however Figure 18.1 shows the compound less than 300 metres from the ESF compound. The EPA considers that potential impacts on the community with regard to construction noise from the operation of both compounds simultaneously has not been adequately considered, and unless this is addressed in the Submissions Report, the ETTT compound should be relocated. Noise impacts associated with the ESF were predicted in the North West Rail Link Stage 1 EIS to significantly exceed the project noise goals for residences in Edensor Street North and South during a variety of activities. Given that the noise assessment for the ESF compound was available during preparation of the ETTT EIS, the EPA considers that a more comprehensive assessment of noise impacts should be undertaken.
- The EPA supports Environmental Management Measure T.6 within Chapter 19 of the EIS, which states that Transport for NSW would coordinate activities with the proponents of other major projects in the area to minimise any cumulative impacts. The EPA recommends that this commitment also be included as a Condition of Approval for the project.

Environmental Management and Mitigation

- The EPA recommends that the environmental management and mitigation measures detailed in Chapter 19 of the EIS (and the corresponding measures in each relevant chapter of the EIS), should be amended as follows:
 - Measure E.2 should be amended to include a commitment to identify and undertake any remediation works required;
 - General Environmental Management Measures - Construction: The EPA considers that further spoil reuse options should be considered. It is therefore recommended that a commitment be included to investigate possible offsite reuse options for suitable excess spoil;

- Surface and Groundwater – Construction: The EPA considers that the mitigation measures during construction should include a commitment to ensure that any water leaving the site would be suitable for the receiving environment, which may require treatment of water prior to discharge;
- Soils and Earthworks: The EPA considers that the Soils and Earthworks section should include a commitment to install erosion and sediment control measures prior to commencement of any works;
- Soils and Earthworks: The EPA considers that point 3 of Measure R.1 should include a commitment to maintain erosion and sediment control measures, as well as to inspect measures;
- Soils and Earthworks: The EPA recommends that measure R.2 should explicitly reference the Waste Classification Guidelines (DECCW 2009);
- Air Quality: The EPA considers that the mitigation measures should include a commitment to monitor weather conditions and implement dust prevention measures where appropriate; and
- Noise and vibration: The EPA considers that the noise and vibration commitments should include a commitment to erect any temporary and permanent noise barriers as early as possible.