



Your reference: SSI-5100
Our reference: DOC12/14102
Contact: Sarah Deards 9995 6816



Diane Sarkies
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Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001



Dear Ms Sarkies

EPA response to public exhibition of North West Rail Link EIS 1 (SSI-5100)

I refer to your letter dated 3 April 2012, inviting the NSW Environment Protection Authority (EPA) to make a submission regarding the Environmental Impact Statement (EIS) for major civil construction works on the North West Rail Link.

The EPA has reviewed the EIS and provided comments and recommendations in relation to the conditions of approval for the key issues of noise, surface water and groundwater, and soil contamination (Attachment 1).

Please note that the letter from the EPA to the Department of Planning and Infrastructure (DP&I) regarding the adequacy review of the EIS, dated 7 March 2012, included comments from both the EPA and Office of Environment and Heritage (OEH). The EPA and OEH are separate agencies with distinct responsibilities. This letter covers EPA's response only. I understand that OEH will be making a separate submission.

The EPA would appreciate a copy of the submissions received by DP&I in relation to the exhibition of the EIS and to have the opportunity to comment on the draft conditions of approval for the project, if approval is recommended by DP&I.

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

Yours sincerely

G. Sheehy 18/5/12

GREG SHEEHY
A/Director Metropolitan
Environment Protection Authority

Attachment 1: The EPA's comments on the Environmental Impact Statement for North West Rail Link Stage 1: Major Civil Construction Works

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The comments below are based on a review of the EIS against current EPA policies and guidance as well as the Director General's Requirements (DGRs) for the project, which comprise:

- The Conditions of Approval (CoA) from the Concept Plan Approval for the North West Rail Link, dated 6 May 2008 (or the transitioned staged SSI approval);
- The Statement of Commitments (SoC) from the Supplementary Submissions Report dated March 2008);
- The supplementary environmental assessment requirements for the SSI modification (dated 3 February 2012); and
- The supplementary environmental assessment requirements for the Major Civil Construction Works (dated 3 February 2012).

Environment Protection Licence

In accordance with Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act), this project will require an environment protection licence for construction and operation. The proponent will need to make a separate application to the EPA for this licence once project approval is granted.

Noise

The EPA has reviewed the '*Technical Paper 2 – Construction Noise and Vibration*' (CNVP) prepared by SLR dated 19 March 2012 (Rev 2.0) including the Construction Noise and Vibration Strategy (CNVS) prepared by SLR dated 16 February 2012 (Rev 1.0) and considers the assessment has been carried out properly and in accordance with the relevant guidelines.

The EPA notes that the project is predicted to have significant airborne noise, ground borne noise and vibration impacts on the surrounding community. Significant exceedances of the identified noise goals are predicted, even with noise mitigation measures in place. The suite of noise and vibration mitigation and management measures to address the expected impacts will not, in many cases, be able to reduce the impacts from the works to a level even close to the relevant construction noise and vibration goals. Therefore effective communication with, and appropriate management responses to the concerns of, the affected community will be of paramount importance. The EPA also considers that temporary and, where possible, operational noise barriers should be erected as early as possible in construction of the project. The EPA notes that standard hoardings of height 3m are proposed around most construction sites. The use of higher 6m hoardings is discussed for sites such as Cherrybrook where there are spoil truck movements. These higher hoardings should be considered, where feasible, at all construction sites, particularly where there is the potential for impacts from spoil truck movements on sensitive receivers.

The EIS identifies the need for substantial work outside of standard construction hours including twenty four hour tunnelling, operation of tunnelling support sites and spoil removal by trucks. Table 3.1 on p9 of the CNVS outlines some proposed restrictions on works outside of standard construction hours including that 'no more than four consecutive nights of high noise and/or vibration generating work may be undertaken over any seven day period'. The EPA does not generally support more than two consecutive nights of such work per week. The EPA also considers that truck movements outside standard hours, and particularly at night time (10pm to 7am) should be minimised, to reduce the potential for sleep disturbance as much as possible. Table 3.1 further indicates that work generating high noise should be scheduled nominally between 8am and 5pm with no work on Sundays or public holidays. The period 1pm and 5pm on Saturdays is also outside standard construction hours. The EPA considers there is a need for clear justification and prior approval for individual works packages before any construction works is undertaken outside the recommended standard hours defined in Section 2.2 of the Interim Construction Noise Guideline.

The EIS identifies that blasting may be required if hard rock is encountered. If blasting is required, the proponent will need to carry out an assessment of the potential noise and vibration impacts from blasting, and a strategy to minimise and manage those impacts.

Other minor noise comments include:

- The distances between the receiver locations and the closest construction work locations presented in Sections 7.3 through to 7.13 of the CNVP should be checked. In some cases the distances seem improbable, eg. Table 7.3, Receiver area D (School) does not appear an equidistant 135m from both the Epping Decline and Epping Services Facility.
- In Sections 7.3 through to 7.13 of the CNVP, where an assessment of night-time L_{Amax} truck noise concludes that the risk of sleep disturbance is low or moderate, this is explicitly stated in the text (eg. 2nd last para on p46). Where the results of the assessment infers that the risk of sleep disturbance may be high (eg. Section 7.6.5 with access via Old Northern Road and Terminus Street or 7.7.6 or 7.8.6) this should likewise be explicitly stated in the text.

Chapter 20 of the EIS has qualitatively considered the cumulative noise impacts on sensitive receivers from construction works to be completed in Stage 1 and Stage 2 of the project and other projects being undertaken in the vicinity of the project. However, the Hills M2 Upgrade project has not been considered. Even if works associated with the M2 upgrade will be complete once North West Rail Link works are scheduled to begin, the EPA considers that project impacts on the community in this area should be considered with regard to the fact that this area was recently subject to a substantial period of works, both within and outside standard construction hours. Further, the EPA considers the proponent should commit to working with the proponents of any construction projects being undertaken concurrently in the vicinity of the project to coordinate works to minimise impacts on and maximise respite for the affected sensitive receivers.

Recommendation

The EPA recommends the conditions of any consent include the following:

Construction work must:

- (a) only be undertaken on Monday to Friday between the hours of 7am and 6pm,
 - (b) only be undertaken on Saturday between the hours of 8am and 1pm, and
 - (c) not be undertaken on any Sunday or Public Holiday,
- except if approved by the EPA and expressly permitted in the Environment Protection Licence.

The EPA further recommends that any conditions of approval for the project require the proponent to coordinate works with other projects in the vicinity of the project to coordinate works to minimise impacts on and maximise respite for the affected sensitive receivers.

Surface water and groundwater

The concerns raised by the EPA in relation to surface water and groundwater during review of the adequacy of the EIS (letter to DP&I dated 7 March 2012) have not been addressed.

The EPA considers that the EIS still does not contain sufficient information regarding groundwater or surface water treatment during the construction phase of the project. In particular, the EPA considers that the following issues have not been adequately addressed:

- The amount and quality of water to be discharged to local waterways;
- The location of discharge points; and
- The method of treating surface water and contaminated groundwater to a standard appropriate for the receiving environment.

The Conditions of Approval for the project require an assessment of existing groundwater quality (CoA 3.8a) as well as risks to surface water quality from contaminated groundwater (CoA 3.7). The SoC also state that detailed groundwater investigations will be undertaken to inform future design development. The EPA notes that the complete groundwater quality results have not been provided in the EIS but will be provided in the Submissions Report. Whilst the EIS provides some discussion of measures to avoid, manage, monitor and mitigate risks to surface water quality from contaminated groundwater, as the groundwater quality has not been adequately characterised, it is not possible to ascertain whether these measures will be effective. Once groundwater quality data is available, the

proponent should determine appropriate water quality limits for discharge from site, and methods to treat the groundwater to achieve these limits.

Condition of Approval 3.8c requires consideration of options for the sustainable use and/or disposal of tunnel inflow. The EPA considers that this condition cannot be adequately met until an appropriate groundwater quality assessment has been undertaken, which will enable identification of the suitability of water for reuse on site in terms of environmental and human health impacts.

Recommendation

The EPA recommends that any approval issued by DP&I requires an assessment of groundwater and surface water quality, determination of appropriate water quality limits and an appropriate treatment method to achieve these limits and options for tunnel inflow reuse prior to the commencement of construction of the project.

Soil Contamination

The EPA considers that the EIS does not contain adequate information regarding contaminated soils within the project area, as contamination assessments have not been finalised. Assessment of the contamination status of soils to be disturbed or excavated during the project works should be undertaken prior to works disturbing soils being undertaken in a given area.

Recommendation

The EPA recommends that any approval issued by DP&I requires finalisation of the contamination assessments prior to commencement of construction of the project.