



DOC19/1007728

18 November 2019

Ms Naomi Moss  
Senior Planning Officer  
Department of Planning, Industry and Environment  
GPO Box 39,  
Sydney NSW 2001

Dear Ms Moss

**M12 Motorway (SSI 9364)  
Advice on the Environmental Impact Statement (EIS)**

I am writing to you in reply to the invitation to the Environment Protection Authority (EPA) to provide advice on the Environmental Impact Statement (EIS), including recommendations for Conditions of Approval, for the above proposal.

The EPA understands that the project involves construction of a 16 km long dual carriageway between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham that would provide the main access between the Western Sydney Airport and Sydney motorway network. The new motorway would be two lanes in each direction astride a central median strip that would allow further expansion to six lanes and is inclusive of bridge structures over creeks and roads, flyovers and on/off-ramps; realignment of other roads intersecting the motorway; active transport links; adjustment, protection or relocation of utilities; ancillary facilities such as toll gantries, electronic signage and ramp metering; permanent water quality management including swales and basins; adjustment of waterways where required; and temporary ancillary facilities including site compounds and construction sedimentation basins.

The EPA has reviewed the EIS provided by the Department of Planning, Industry and Environment (DPIE) and advises the following with regards to noise and vibration, water quality and contaminated lands:

**1. Noise and Vibration**

The EPA reviewed Section 7.7 of the EIS main report and Noise Impact Assessment (NIA) (Appendix K) for the M12 Motorway.

The report addresses the requirements of the Secretary's Environmental Assessment Requirements (SEARs), however further information and clarification should be provided for the following items:

**Noise Logging and Assessment Noise Levels**

- The NIA relies on 15 noise logging locations to determine the existing noise levels in the areas likely to be affected by the construction and use of the M12 Motorway. These noise levels are then used to determine the assessment noise levels for both construction and the future operation of the motorway.

**Phone** 131 555  
**Phone** 02 9995 5555  
(from outside NSW)

**Fax** 02 9995 6900  
**TTY** 133 677, then  
ask for 131 155

PO Box 668  
PARRAMATTA  
NSW 2124

Level 13  
10 Valentine Avenue  
PARRAMATTA NSW  
2150 AUSTRALIA

**info@epa.nsw.gov.au**  
**www.epa.nsw.gov.au**  
**ABN 43 692 285 758**

- The EPA advises that the NIA indicates that logger position L01 is representative of both NCA01 and NCA02. Similarly, the logger position L03 is representative of both NCA03 and NCA06. The claim that the noise levels across these noise catchment areas (NCAs) are similar to that of the logger location is not evidenced by attended noise measurements at the NCAs that did not receive a noise logger. The EPA advises that isolated parts of NCAs may be subject to different background noise levels than those measured at the chosen noise monitoring locations. **The EPA advises that the NIA should include confirmation and clarification that the noise levels at L01 and L03 are representative of the noise environment across the adjacent NCAs.** Specifically, the EPA is concerned that the isolated areas of NCA03 and NCA01 may not be represented by L03 and L01, respectively.

### Construction Noise Levels and Impacts

- As previously advised prior to exhibition, the EPA continues to have concerns regarding how the construction noise has been assessed. Specifically, the proposed construction noise impact methodology in Table 7-110 of the EIS main report mirrors the RMS's *Construction Noise and Vibration Guideline* (2016). However, **the EPA advises that the noise impact methodology should also be expressed as per the *Interim Construction Noise Guideline* (ICNG) (DECC, 2009).** The EPA notes that the ICNG provides guidance on assessing impacts at receivers as noise affected, highly noise affected, and noise affected outside recommended standard hours. Further, the NIA should consider section 5 of the ICNG to ensure that effective qualitative assessments of the noise impacts are taking place and are in line with the proposed mitigation and management methodology.
- There is a lack of information and certainty on the potential duration and extent of construction noise impacts, particularly for work scheduled outside of the recommended standard hours. **The EPA advises that the EIS should include more detailed information on the type and duration of noise that would be deemed "noise affected" and "highly noise affected" under the ICNG.**

### Operation Noise Levels

- The EPA notes that the predicted noise levels for the motorway are such that additional treatment is required for many dwellings and non-residential receivers. These receivers are contained within Annex D of the NIA. Several of these receivers trigger the additional mitigation by causing an increase in the noise level at the receivers of more than 2 dB. However, the EPA notes the NIA states that the noise model has an accuracy of +/- 2 dB, as well as the validation of the model indicating that noise levels may also differ in situ from the predicted noise level at a receiver based on existing noise levels. Given that receivers that do not qualify for treatment are not presented in Annex D, **the EPA requires confirmation that the accuracy of the noise model will not result in residents that qualify for mitigation not receiving treatment due to be modelled below the 2 dB increase threshold.**

## **2. Water Quality**

The EPA reviewed Section 7.9 of the EIS main report and Surface Water Quality and Hydrology Assessment (Appendix M) for the M12 Motorway.

### EIS indicates further water quality assessment is required to inform discharge criteria

The EIS indicates sediment basin discharges will contain pH of 6.5 to 8.5 and total suspended solids (TSS) concentrations less than 50 mg/L. The EIS includes a qualitative assessment of the potential impact of discharges, suggesting that discharges with TSS concentrations less than 50 mg/L are likely to have turbidity less than the guideline value. However, the EIS notes that the concentrations of other potential pollutants are unknown and states, "Further water quality assessment would be undertaken during detailed design to establish site specific discharge criteria for sediment basins."

**The EPA will require a discharge impact assessment consistent with the EPA policy and the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZG, 2018) to inform s45 licensing decisions.**

Given the location of the development and the nature of the receiving waterways (noting that discharge points appear to be located some distance from the sensitive receiving waterways) it is considered that the potential water pollution risks can be managed through appropriate erosion and sediment control measures and the requirement for a discharge impact assessment can therefore be addressed through conditions of approval.

#### Level of Assessment

The EIS highlights that the project impacts two catchment areas:

- Hawkesbury-Nepean: a majority of the discharges would occur within this catchment. Proposed discharges are upstream flowing through areas characterised by agriculture and urban development before discharge to Hawkesbury-Nepean River; and
- Hinchinbrook Creek: proposed discharges are upstream of the waterway which is in the surface water catchment of sensitive receiving environments (wetlands): Coastal Management State Environmental Planning Policy (SEPP) ID113, ID114, ID117 and ID276.

The level of assessment and consideration of practical and reasonable mitigation measures should be commensurate with the potential water pollution risks. For example, the proposed discharges to waterways that flow to the lower Hawkesbury-Nepean River are likely to pose a low risk and therefore a simple qualitative assessment could be appropriate to consider potential risks and identify appropriate mitigation measures to manage any residual risks. Discharges to Hinchinbrook Creek flow to sensitive receiving environments. In this case discharges present a higher risk to the waterways and a more detailed assessment of the potential impacts and associated mitigation measures is appropriate.

**The proponent is encouraged to consult with the EPA early in the assessment process to outline the proposed approach to the discharge impact assessment and what practical measures will be employed to maintain or restore the relevant environmental values.**

#### Recommended condition of approval

1. Prior to commencement of construction, the Applicant must provide a **discharge impact assessment** commensurate with the level of potential water pollution risk. This assessment must:
  - (a) identify and estimate the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point;
  - (b) describe the nature and degree of impact that any discharge(s) may have on the receiving environment, including consideration of all pollutants that pose a risk of non-trivial harm to human health and the environment;
  - (c) assess the potential impact of discharges on the environmental values of the receiving waterway. This should be done with reference to the national Water Quality Guideline criteria for relevant chemical and non-chemical parameters, including average or typical through to worst-case scenarios;
  - (d) where a mixing zone is required, demonstrate how the national Water Quality Guideline criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge;
  - (e) demonstrate how the proposal will be designed and operated to:
    - i. protect the Water Quality Objectives for receiving waters where they are currently being achieved;
    - ii. contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved; and

- iii. demonstrate that all practical and reasonable measures to avoid or minimise water pollution and protect human health and the environment from harm are investigated and implemented.

### 3. Contaminated Lands

The EIS main report (Section 8.1) and the Soils and Contamination Assessment Report (Appendix O) have assessed the potential impacts associated with the proposed development. The EPA notes that there is a high potential of encountering asbestos and historical uncontrolled fill, between the airport interchange and Western Sydney Parklands. The assessment has determined **that additional investigations are necessary**, particularly within the SUEZ Kemps Creek Resource Recovery Park area to assess the extent of high-risk landfill gas. Additional investigations are also proposed in other AEIs, as per Table 8-9 in the EIS main report.

The EIS did not include a management plan for dealing with these contaminants. Therefore, the EPA requires the **preparation of the following management plans and report** as part of the Response to Submissions (RtS) to document how remediation would be undertaken, if required:

- i. Asbestos Management Plan
- ii. Contaminated Land Management Plan
- iii. Unexpected Finds Protocol (The protocol should include detailed procedure for identifying and dealing with unexpected contamination, asbestos and other unexpected finds. The proponent should ensure that the procedure includes details of who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved)

#### Recommended conditions of approval

1. The proponent is required to conduct more investigations as detailed in Table 8-9 in the EIS main report, prior to construction.
2. The proponent must engage an EPA accredited site auditor to prepare a section B site audit statement that confirms that the remediation action plan is appropriate for the site and that the site can be made suitable for the proposed use.
3. The proponent must adhere to the management measures accepted by the Auditor.
4. The processes outlined in State Environmental Planning Policy 55 - Remediation of Land (SEPP55) be followed in order to assess the suitability of the land and any remediation required in relation to the proposed use.
5. The proponent must ensure the proposed development does not result in a change of risk in relation to any pre-existing contamination on the site so as to result in significant contamination [note that this would render the proponent the 'person responsible' for the contamination under section 6(2) of the *Contaminated Land Management Act 1997*].
6. The EPA is to be notified under section 60 of the *Contaminated Land Management Act 1997* for any contamination identified which meets the triggers in the Guidelines for the Duty to Report Contamination  
([www.epa.nsw.gov.au/resources/clm/150164-report-land-contamination-guidelines.pdf](http://www.epa.nsw.gov.au/resources/clm/150164-report-land-contamination-guidelines.pdf))
7. The EPA recommends the use of "certified consultants". Please note that the EPA's *Contaminated Land Consultant Certification Policy*, Version 2, November 2017, (<http://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/clm/18520-contaminatedland-consultant-certification-policy.pdf?la=en>) supports the development and implementation of nationally consistent certification schemes in Australia, and encourages the use of certified consultants by the community and industry. Note that the EPA requires all reports

submitted to the EPA to comply with the requirements of the Contaminated Land Management Act 1997 to be prepared, or reviewed and approved, by a certified consultant.

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

Yours sincerely



**ALEKSANDRA KIELKIEWICZ-YOUNG**  
Unit Head, Metropolitan Infrastructure – Transport  
Environment Protection Authority