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4 November 2020

Ms Lauren Rose
Senior Planner
Transport Assessments
Department of Planning, Industry and Environment
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Sydney NSW 2001

Email lauren.rose@planning.nsw.gov.au

Dear Ms Rose

M12 Motorway (SSI 9364)
Advice on Amendments and Response to Submissions

I am writing to you in reply to your invitation to the Environment Protection Authority (EPA) to provide comment on the Amendments and Response to Submissions (RtS) for the above project.

The EPA understands the amendments include: changes to the M12-M7 interchange including changes to Elizabeth Drive and Cecil Road intersections, proposed exit ramps, the Wallgrove Road connection Elizabeth Drive and proposed shared user path realignments and the widening of Elizabeth Drive under the M7 motorway and approaches, signalised intersections in the Western Sydney Airport; the option to provide a new connection between the M12 and Elizabeth Drive; two new signalised intersections into the Western Sydney Airport, and additional ancillary facilities to support project delivery.

The EPA provided comments on contamination, water quality and noise and vibration in a submission letter dated 18 November 2019 (ref: DOC19/1007728) during exhibition of the Environmental Impact Statement (EIS).

The EPA has reviewed relevant sections of the RtS including:

- *M12 Motorway Amendment* Report, dated October 2020
- *M12 Motorway Submissions Report*, October 2020
- *Noise and vibration updated technical report*, dated October 2020 (Appendix G)
- *Soils and contamination supplementary technical memorandum*, dated October 2020, prepared by Jacobs (Appendix K)
- *Surface water quality and hydrology supplementary technical memorandum*, October 2020, prepared by Jacobs (Appendix I)
- *Groundwater quality and hydrology supplementary technical memorandum*, October 2020, prepared by Jacobs (Appendix J)

The EPA's comments on the proponent's RtS and amendments to the original proposal for Contamination, Water Quality and Noise and Vibration are provided at **Appendix A**.

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

ALEKSANDRA YOUNG
Unit Head
Regulatory Operations Metro South

APPENDIX A

1. Contamination

The EPA submission to the EIS noted the high potential of encountering asbestos and historical uncontrolled fill between the airport interchange and Western Sydney Parklands and noted that the EIS soils and contamination assessment had recommended additional investigation. The EPA required the preparation of an Asbestos Management Plan, Contaminated Land Management Plan in addition to an Unexpected Finds Protocol. These were not included as part of the package of RtS documents.

The Submissions Report accepted all recommendations in the EIS submission, however limited the scenarios where an EPA accredited site auditor would be engaged to prepare a Section B Site Audit Statement to sites with "asbestos encapsulation" and "highly complex contamination issues". The EPA does not agree with this limited scope for the site audit.

The proponent submitted the *Soils and contamination supplementary technical memorandum* to provide a desktop review of the amended area which identified additional investigation that would be included as part of a Phase 2 Detailed Site Investigation. However, no Detailed Site Investigation has been provided as part of the RtS.

The EPA has revised its recommended conditions regarding contamination issues as follows:

1. A **Contamination Management Sub-Plan** must be prepared as part of the Construction Environmental Management Plan (CEMP) for the management contaminated soil and groundwater, asbestos and unexpected finds. The Contamination Management Sub-Plan must:

   (a) be prepared, or reviewed by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme; and
   (b) include evidence than a NSW EPA-accredited Site Auditor has reviewed the relevant CEMP Sub-Plan(s) by submitting Interim Advice indicating the management measures are appropriate.
   (c) include details of who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved.

   Any variations to the approved CEMP Sub-Plan(s) must be approved in writing by the NSW EPA accredited Site Auditor and evidence of the approval included in the amended Sub-Plan(s).

2. The Proponent must engage a **NSW EPA-accredited Site Auditor** throughout the duration of works for the entire project site, to ensure that any work required in relation to soil and groundwater contamination is appropriately managed. If work is to be completed in stages, the site auditor must confirm satisfactory completion of each stage by the issuance of Interim Audit Advice/s. The Proponent may engage more than one NSW EPA-accredited Site Auditor for this State Significant Infrastructure to exercise the functions required under the terms of this approval.

3. Prior to the commencement of any works that would result in the disturbance of potential or contaminated soils and groundwater at the areas of environmental interest identified in Table 6-60 of the *Amendment Report* (October 2020), detailed site investigations (for contamination) must be conducted to determine the full nature and extent of the contamination at the project area. The **Detailed Site Investigation Reports** (for contamination) and the subsequent report/s, must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New

Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The detailed site investigations must be undertaken in accordance with guidelines made or approved under section 105 of the *Contaminated Land Management Act 1997*.

Nothing in this condition prevents the Proponent from preparing individual Detailed Site Investigation reports (for contamination) for separate sites.

4. Should remediation be required to make land suitable for the final intended land use, a **Remedial Action Plan** must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The Remedial Action Plan must be prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the *Contaminated Land Management Act* 1997 and must include measures to remediate the contamination at the site to ensure the site will be suitable for the proposed use when the Remedial Action Plan is implemented.

   Nothing in this condition prevents the Proponent from preparing individual Remedial Action Plans for separate sites.

5. Prior to commencing with the remediation, the Proponent must submit to the Planning Secretary for information, the Remedial Action Plan/s and a **Section B Site Audit Statement/s** from a NSW EPA accredited Site Auditor that certifies that the Remedial Action Plan is appropriate and that the site can be made suitable for the proposed use. The Remedial Action Plan must be implemented and any changes to the Remedial Action Plan must be approved in writing by the NSW EPA accredited Site Auditor.

6. A 'Section A1 Site Audit Statement' or a 'Section A2 Site Audit Statement' (accompanied by an Environmental Management Plan) and the accompanying Site Audit Report prepared by a NSW EPA-accredited Site Auditor must be submitted to the Approval Authority and the Environmental Representative before commencing use of the infrastructure. The **Site Audit Statement** must be submitted to the Planning Secretary and relevant council after remediation and no later than one (1) month before the commencement of operation. The project area must not be used for the purpose approved under the terms of this approval until a Section A1 (or a Section A2) Site Audit Statement is obtained which states that the land is suitable for that purpose and any conditions on the Section A Site Audit Statement have been complied with.

   Nothing in the conditions prevents the Proponent from obtaining Section A Site Audit Statements for individual parcels of remediated land.

2. <u>Water Quality</u>

The original EIS did not include a construction stage water pollution impact assessment. The EPA's submission recommended a condition that prior to the commencement of construction the applicant prepare a detailed discharge impact assessment to demonstrate that:

- the development would be designed and operated to protect or contribute to restoring the water quality objectives of the receiving waterways
- all practical and reasonable measures to avoid or minimise water pollution would be implemented.

The EPA notes that the RtS commits to preparing this assessment in consultation with EPA as part of detailed design.

The EPA advises that there is a risk of contamination from construction stage stormwater as the site includes large areas of potential contamination. Potential contaminants of concern include metals, hydrocarbons, pesticides, polychlorinated biphenyls, ammonia and nutrients. The proponent states that Detailed Site Investigations would be carried out and a Remedial Action Plan prepared prior to commencement of remediation.

The applicant proposes construction stage erosion and sediment controls consistent with *Managing Urban Stormwater, Soils and Construction, Volume 1* (Landcom, 2004) and *Managing Urban Stormwater: Soils and Construction, Volume 2D Main road construction* (DECC, 2008). However, the measures recommended by Landcom (2004) and DECC (2008) are designed to manage uncontaminated sediment and are generally not adequate for managing the potential water pollution impacts associated with contaminated lands.

In this context, **the EPA advises that the Water Pollution Impact Assessment must be prepared with reference to the Detailed Site Investigations and Remedial Action Plan to inform design of appropriate water pollution controls and monitoring for each construction area and stage**.

The water pollution impact assessment would also need to consider the sensitivity of the receiving waterways. For example, the eastern end of the proposed site drains to Hinchinbrook Creek which eventually flows to sensitive coastal wetlands protected under the *State Environmental Planning Policy (Coastal Management) 2018.* Enhanced pollution controls, including larger capacity sediment basins, may be required to mitigate potential water pollution risks to sensitive receiving waterways.

It is unclear whether discharges of intercepted groundwater are proposed. The EIS states that the water table would be intersected at *one* cut location and determined that groundwater inflow would be negligible and could be managed by evaporation. The RtS indicates that the amended proposed footprint would intersect the water table at *three* cut locations but maintains that the expected small groundwater inflow volumes could be disposed of through evaporation and that discharges are unlikely. However, Appendix J of the RtS (*Groundwater quality and hydrology supplementary memorandum*) states that discharge to waters may be required if inflow rates are high.

The EPA advises that options to avoid discharges, such as appropriate reuse, should be considered in the first instance. If discharges to surface waters are proposed, these would need to be assessed as part of the water pollution impact assessment to inform licensing decisions consistent with section 45 of the *Protection of Environment Operations Act 1997*.

The EPA recommends the following conditions to require preparation of a water pollution impact assessment prior to commencement of construction.

Pollution of waters

1. The development must comply with section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters including both surface and groundwater, except for pollutants that are regulated by an environmental protection licence.

2. Prior to the commencement of construction, the proponent must prepare a **Water Management Report**, providing details of the construction stage water management. The report must:

   (a) be prepared by a suitably qualified and experienced person(s)
   (b) be prepared in consultation with the EPA
   (c) include details of water pollution mitigation measures
   (d) based on a detailed site investigation of contamination risk, including measures to avoid and minimise discharges, such as increased sizing of sediment basins, appropriate reuse, and enhanced sediment and erosion controls

(e) designed to achieve the relevant ambient water quality outcomes, consistent with the Water Pollution Impact Assessment (see below).
(f) include a Trigger Action Response Protocol (TARP) for potential discharge waters, identifying alternative disposal options for water with contaminant concentrations exceeding management criteria
(g) include details of a construction stage surface water monitoring program.

3. Prior to commencement of construction, the proponent must provide a **Water Pollution Impact Assessment** commensurate with the level of potential water pollution risk. This assessment must:

(a) be prepared by a suitably qualified and experienced person(s)
(b) be prepared in consultation with the EPA
(c) identify and estimate the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point
(d) 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
(e) 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
(f) 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
(g) 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
    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.

The results of the assessment will be used by the EPA to inform licensing, such as monitoring and limit conditions, consistent with section 45 of the *Protection of Environment Operations Act 1997.*

1. Noise and Vibration

The EPA comments regarding noise and vibration in the submission to the EIS have been adequately addressed. However, it is noted that concrete crushing and other ancillary operations may have a 'high' impact on several noise catchment areas. Under section 2.3 the *Interim Construction Noise Guideline* (ICNG) (EPA, 2009) the proponent must provide a clear justification for works outside of standard construction hours.

While the EPA acknowledges that out of hours work (OOHW) may be necessary for safety and traffic reasons for the road construction portion of the project, a strong justification for the 24/7 use of the ancillary facilities has not been provided. Crushing activities at the ancillary facilities have the potential to result in highly annoying noise characteristics. It is not clear why this activity would need to take place outside standard construction hours. For example, it may be possible to undertake crushing during the day and stockpile material that may need to be utilised at night. The EPA recommends the proponent implement all feasible and reasonable mitigation, including work-scheduling to minimise out of hours works.