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Qube Logistics  
C/- Tactical Group  
Level 15, 124 Walker St  
North Sydney NSW 2060

**Re: Moorebank Precinct West Stage 3 - review of air quality impacts**

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## 1 Introduction

An Environmental Impact Statement (EIS) is being prepared to support the latest stage of the Moorebank Precinct West (MPW), comprising the construction and operation of Stage 3 of the MPW Project. MPW Stage 3 approval is sought for the following project components:

- establishment of a works compound to facilitate site development works for MPW Stage 2 and MPW Stage 3, and future stages of the MPW development;
- progressive subdivision of the MPW site into nine allotments for warehousing and distribution facilities, biodiversity conservation, interstate intermodal terminal facility (IMT); rail corridor for completion and operation of the import/export (IMEX) freight terminal and rail link; and
- ancillary works including access roads, earthworks, utilities, stormwater and drainage, signage and landscaping

The proposed Stage 3 works are consistent with the approved concept plan (SSD 5066) for the MPW site.

## 2 Assessment requirements

This purpose of report is to review the potential air quality impacts from MPW Stage 3 on local air quality. On 20 March 2020 the Department of Planning, Industry and Environment (DPIE) issued Secretary's Environmental Assessment Requirements (SEARs) for the project. The relevant SEARs, and how they are addressed, are outlined in Table 2.1.

**Table 2.1 SEARs for air quality**

Requirement	How this is addressed
A comprehensive air quality impact assessment including:	
a) an assessment of construction related impacts including dust and wind erosion from exposed surfaces and proposed mitigation measures and safeguards to control dust generation and other airborne pollutants and to minimise impacts on nearby receptors;	Construction related impacts associated with the MPW site have previously been assessed for the Concept Plan and Early Works. The proposed Stage 3 works are consistent with the approved concept plan and the impact to local air quality from MPW Stage 3 is expected to be no different to what has already been assessed and approved for the MPW site. Further discussion on the previous assessments is provided in Section 3.  Safeguards to control dust during construction are outlined in the approved Air Quality Management Plans (Construction and Operation) for MPW Stage 2. The approved plans will be updated, where required, to reflect the proposed changes under MPW Stage 3.

**Table 2.1 SEARs for air quality**

Requirement	How this is addressed
b) an assessment of cumulative impacts associated with any existing development and any developments having been granted development consent, but which have not commenced	Cumulative impacts associated with the construction and operation of the Moorebank Precinct East (MPE) site have previously been assessed for the Concept Plan and MPW Stage 2 project. The proposed Stage 3 works are consistent with the approved concept plan and the cumulative impact to local air quality from MPW Stage 3 is expected to be no different to what has already been assessed and approved for the MPW site. Further discussion on the previous assessments is provided in Section 3.
c) an updated assessment/review of direct and indirect greenhouse gas emissions arising from this development and associated impact mitigation requirements, in reference to the Concept Plan greenhouse gas assessment.	Greenhouse gas emissions associated with the MPW site have previously been assessed for the Concept Plan and Early Works. The proposed Stage 3 works are expected to be no different to what has already been assessed and approved for the MPW site. Further discussion on the previous assessments is provided in Section 3.

### 3 Review of potential air quality impacts

Impacts to local air quality have been extensively assessed in previous air quality impact assessments (AQIA) for the precinct. From an air quality perspective, the proposed Stage 3 works do not introduce any new or additional emission sources not already assessed in these previous assessments. A summary of the previous assessments, the emissions scenarios considered and the relevance to MPW Stage 3 is provided as follows:

- **MPW Concept Plan and Early Works:** an AQIA was completed for construction and operational phases of development. The emissions scenarios assessed three different project layouts and four phases of development of the site (Phase A, B, C and 'Full Build'). The Full Build scenario corresponds to maximum annual container throughput (1,050,000 TEU import/export and 500,000 TEU interstate movements) and full extent of warehousing across the entire MPW site (300,000 m<sup>2</sup>). Each scenario, except 'Full Build', included construction activities. The modelling scenarios for Phase C included construction activities (dust emission sources) in the southern portion of the site, corresponding to the approximate location of the proposed construction activities and compound for MPW Stage 3.
- **Modification of the MPW Concept Plan and Early Works:** an AQIA was completed for modified construction scenario for additional site preparatory works, including the import of 1.6 million cubic meters of fill during construction. The Modification assessment included a construction compound located in the central portion of the MPW site (approximate location corresponds to MPW Stage 3 proposed Lot 7/8).
- **MPW Stage 2:** an AQIA was completed for construction and operational phases of development. The operational scenario for Stage 2 included the IMT operating at 500,000 TEU per annum and 215,000 m<sup>3</sup> of warehousing, located in the northern portion of the site (approximate location corresponds to proposed Lots 5 and 6). The construction scenario included fill placement, stockpiling, bulk earthworks and road construction. The modelled construction compound was located in the central portion of the MPW site (approximate location corresponds to MPW Stage 3 proposed Lot 7/8).

The modelling for each of the previous AQIAs found that the project-only local air quality impacts were minor, when compared to existing background and impact assessment criteria. When background was added, the cumulative assessment predicted no additional exceedances of the impact assessment criteria, except for annual average PM<sub>2.5</sub>, which was caused primarily by the existing high background for PM<sub>2.5</sub> in the region.

Greenhouse gas assessments were completed for construction and operational phases of the MPW Concept Plan and Early Works MPW Stage 2. The proposed Stage 3 works would not introduce any new or additional greenhouse gas emission sources that were not already assessed in these previous assessments. For example, no additional diesel consumption is anticipated during construction for MPW Stage 3, beyond what has been assessed in previous assessment.

## 4 Conclusion

The proposed MPW Stage 3 works do not introduce any new or additional works not already assessed in for previous approvals at the site, as follows:

- the Concept Plan AQIA assessed construction activity in the southern portion of the site, which is effectively equivalent to proposed construction activities associated with the MPW Stage 3 construction compound. The full build scenario included warehousing across the northern, central and southern portions of the site. Although the locations differ slightly to the proposed MPW Stage 3 subdivision, this would not have a significant impact on the off-site modelling predictions;
- the Concept Plan Modification AQA assessed additional import fill required for construction across the entire site. Although the construction compound was in a slightly different location to the proposed MPW Stage 3, this would not have a significant impact on the off-site modelling predictions;
- similarly, the MPW Stage 2 AQIA assessed the construction compound in a slightly different location to the proposed MPW Stage 3, however this would not have a significant impact on the off-site modelling predictions. The MPW Stage 2 AQIA also assessed warehousing activities consistent with the proposed subdivisions (Lot 5 and 6);
- all AQIAs completed for the precinct considered the cumulative impact associated with the construction and operation of the Moorebank Precinct East (MPE) site; and
- Greenhouse gas emissions have been assessed for activity levels consistent with the proposed MPW Stage 3 works.

The impact to local air quality from MPW Stage 3 is therefore expected to be no different to what has already been assessed and approved for the MPW site. Air quality mitigation and management measures are outlined in the approved Air Quality and Management Plans (Construction and Operation) for MPW Stage 2. These would be reviewed and updated, where required, to reflect the proposed changes under MPW Stage 3.

Yours sincerely



**Ronan Kellaghan**

[rkellaghan@emmconsulting.com.au](mailto:rkellaghan@emmconsulting.com.au)