

Moorebank Precinct East - Concept Plan Modification 2

(MP10_0193_MOD2)

Air Quality Assessment



SIMTA

SYDNEY INTERMODAL TERMINAL ALLIANCE

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MOOREBANK PRECINCT EAST INTERMODAL FACILITY CONCEPT PLAN APPROVAL MODIFICATION (10_0193_MOD2) – REVIEW OF AIR QUALITY IMPACTS

Report purpose

This report has been prepared to address the potential air quality impacts associated with proposed changes to the Concept Plan Approval (MP 10_0193) for an intermodal terminal (IMT) facility, warehousing and a freight village at Moorebank, NSW (the Moorebank Precinct East Project (MPE Project) (formerly the SIMTA Project)). This report supports an application to modify the MPE Concept Plan Approval under section 75W (now repealed) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), which continues to apply pursuant transitional provisions.

Proposal modification

It is noted that since the MPE Concept Plan Approval and *Environment and Biodiversity Conservation Act 1999* (EPBC Act) Approval, several design refinements have been made to the MPE Project in response to opportunities to optimise the operation of the IMT and to address matters which were not contemplated at the time the MPE Concept Plan Approval was granted. The following changes to the MPE Project are now proposed (hereafter referred to as the Modification Proposal):

- Extend the land to which the MPE Concept Plan Approval applies to recognises works on Moorebank Avenue and drainage works to the south and east of the MPE site.
- Moorebank Avenue upgrade from the northern to the southern extent of the MPE site including alterations to the existing lane configuration, raising of the vertical alignment, some widening and the provision of an on-site detention (OSD) basin for stormwater on the western side of Moorebank Avenue.
- Provision of an interim MPE site access to the warehousing.
- Reconfiguration of the internal road network within the MPE Stage 2 site and use of all internal roads by both light and heavy vehicles, rather than light vehicles only for internal road No.2.
- Importation of clean general fill (approximately 600,000m³) material for bulk earthworks, as part of the Moorebank Avenue upgrade works and integrated drainage solution for the site.
- Change to the location of and land uses within the freight village, and provision of warehousing along the Moorebank Avenue frontage (previously identified as IMT).
- Changes to the staging of development, including construction of all warehouses as part of the MPE Stage 2 project.
- Subdivision of the MPE site.

Implications of the Modification Proposal for local air quality

An Air Quality Impact Assessment (AQIA) was completed for the MPE Concept Plan Approval (Pacific Environment, 2013). The AQIA considered emissions from construction and operational phases of the MPE Concept Plan and quantitatively assessed the potential for operational impacts on local and regional air quality. The construction phase for the overall Concept Plan Approval was not assessed quantitatively, rather, as outlined in the AQIA, air quality impacts from each stage of construction would be assessed for each staged approval and managed under the Construction Environmental Management Plan (CEMP) developed at each stage.

The Modification Proposal includes some changes that may affect local air quality and/or change the conclusions of the previous AQIA. These changes and the implications for air quality, are described in

Table 1.

Table 1: Modification Proposal and implications for local air quality impacts		
Key changes for the Modification Proposal	Implications for air quality assessment	Further assessment required?
Extend the land to which the MPE Concept Plan Approval applies to recognise works on Moorebank Avenue and drainage works to the south of the MPE site	Refer below	Refer below
Moorebank Avenue upgrade from the northern to the southern extent of the MPE site including alterations to the existing lane configuration, raising of the vertical alignment, some widening and the provision of an on-site detention (OSD) basin for stormwater on the western side of Moorebank Avenue	<p>Construction activities associated with the Moorebank Avenue upgrade would result in a short term increase in dust emissions. Due to the staged nature of the MPE Project, construction impacts for the overall Concept Plan Approval were not assessed quantitatively, rather, as outlined in the AQIA, air quality impacts from each stage of construction would be assessed for each staged approval and managed under the Construction Environmental Management Plan (CEMP) developed at each stage.</p> <p>This remains the case for the Modification Proposal, however an assessment of construction phase impacts is presented in this report, incorporating works associated with the Moorebank Avenue upgrade plus the importation of fill, as described below.</p> <p>For the operational phase, trucks travelling along Moorebank Avenue were assessed in the Concept Plan Approval AQIA. The bulk</p>	Although the conclusion remains that construction phase impacts are assessed for each staged approval, an assessment of construction phase impacts is presented in this report nevertheless.

Table 1: Modification Proposal and implications for local air quality impacts

Key changes for the Modification Proposal	Implications for air quality assessment	Further assessment required?
	earthworks for the Modification Proposal would have no material effect of local air quality and would not change the conclusions in the AQIA.	
Provision of an interim MPE site access to the warehousing	Emission for trucks accessing the site were estimated based on distance based emission factors (i.e. grams per km travelled). Providing the interim site access is unlikely to significantly change the total return distance travelled and therefore unlikely to change the emissions estimates, modelling and conclusions in the Concept Plan Approval AQIA.	No
Reconfiguration of the internal road network within the MPE Stage 2 site and use of all internal roads by both light and heavy vehicles, rather than light vehicles only for internal road No.2	An assessment of total traffic movements on local roads was presented in the Concept Plan Approval AQIA, however for internal roads, only emissions from heavy vehicles (HV) were modelled. Therefore, the combined impacts from HV and light vehicles (LV) is presented below for the Modification Proposal.	Yes, potential impacts considered below.
Importation of clean general fill material (of approximately 600,000m ³) for bulk earthworks	The importation of fill for bulk earthworks would result in a short term increase in dust emissions. As described previously, the air quality impacts from construction were not assessed quantitatively in the Concept Plan Approval AQIA.	Although the conclusion remains that construction phase impacts are assessed for each staged approval, an assessment of construction phase impacts is presented in this report
Change to the location of and land uses within the freight village, and provision of warehousing along the Moorebank Avenue frontage	The specific land uses for the freight village were not assessed in the Concept Plan Approval AQIA, however this is not expected to have any significant effect of local air quality or change the conclusions of the AQIA. The provision of warehousing along the Moorebank Avenue frontage (in place of an	No

Table 1: Modification Proposal and implications for local air quality impacts		
Key changes for the Modification Proposal	Implications for air quality assessment	Further assessment required?
	extended IMT) is also not expected to have any significant effect of local air quality or change the conclusions of the AQIA as the total GFA of warehousing remains the same as the existing Concept Plan Approval.	
Changes to the staging of development, including construction of all warehouses as part of the MPE Stage 2 project (previously identified as IMT).	Changes to the staging of the development is not expected to change the conclusions of the AQIA, which assessed the ultimate proposed site freight throughput for the Concept Plan. Each stage of the site development is assessed separately for each staged approval process.	No
Subdivision of the MPE site.	Subdivision of the MPE site is not expected to change the conclusions of the AQIA.	No

In summary, revised assessment for the Modification Proposal is presented below to account for:

- Construction activities including the importation of 600,000 m³ of clean general fill and the upgrades to Moorebank Avenue.
- Operational phase changes associated with traffic movements on internal roadways.

Assessment approach

The approach to the assessment follows guidelines recommended in the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* ("the Approved Methods") (NSW EPA, 2005). Local air quality impacts from the Modification Proposal have been assessed using a Level 2 assessment approach, in accordance with the Approved Methods.

Emissions are estimated for Modification Proposal, using best practice emission estimation techniques and a regulatory dispersion model is used to predict ground level concentrations for key pollutants at nearby sensitive receivers. A detailed description of the dispersion model, including the dispersion meteorology can be found in Ramboll Environ (2016).

The key emissions to air during the construction phase of the Modification Proposal are fugitive dust or particulate matter (PM). During operation of the Modification Proposal, the key emissions would be associated with the combustion of diesel and other fossil fuels. Modelling predictions are compared against the NSW EPA's impact assessment criteria, outlined in the Approved Methods. It is noted that the Approved Methods do not include impact assessment criteria for PM_{2.5} and therefore modelling predictions are compared with the National Environment Protection (Ambient Air Quality) Measure (AAQ NEPM), national reporting standards (NEPC, 2015). The relevant criteria / standards are presented in **Table 2** and **Table 3**. For the construction phase of the Modification Proposal, amenity impacts associated with construction dust are also considered and the impact assessment criteria for dust deposition are summarised in **Table 4**.

PM metric	Averaging period	Concentration ($\mu\text{g}/\text{m}^3$)	Purpose
TSP	Annual	90	NSW EPA impact assessment criteria
PM ₁₀	24 hour	50	NSW EPA impact assessment criteria
		50	AAQ NEPM national reporting standard
	Annual	30	NSW EPA impact assessment criteria
		25	AAQ NEPM national reporting standard
PM _{2.5}	24 hour	25	AAQ NEPM national reporting standard
		20	AAQ NEPM national reporting standard
	Annual	8	AAQ NEPM goal for 2025
		7	AAQ NEPM goal for 2025

Pollutant	Averaging period	Concentration	
		$\mu\text{g}/\text{m}^3$ ¹	pphm ²
NO ₂	1-hour	246	12
	Annual	62	3
SO ₂	10-minute	712	25
	1-hour	570	20
	24-hour	228	8
	Annual	60	2
CO	15-minute	100,000	8,700
	1-hour	30,000	2,500
	8-hour	10,000	900
1,3-butadiene	1-hour ³	40	1.8
Benzene	1-hour ³	29	0.9
PAHs (as BaP)	1-hour ³	0.4	-

Note 1: Gas volumes for criteria pollutants expressed at 0°C and 1 atmosphere, and principal toxics at 25°C
 Note 2: pphm – parts per hundred million
 Note 3: Expressed as the 99.9th Percentile Value.

Pollutant	Maximum Increase in Dust Deposition	Maximum Total Dust Deposition Level
Deposited dust	2 g/m ² /month	4 g/m ² /month

The impact assessment criteria for 'criteria pollutants' are applied at the nearest existing or likely future off-site sensitive receptor and compared against the 100th percentile (i.e. the highest) dispersion modelling prediction. Sensitive receptors locations for assessment have been selected as representative of residential areas surrounding the site and are consistent with those reported in previous air quality assessments for the MPE site. The locations are shown in **Figure 1** at the end of this report. Both the incremental and cumulative impacts need to be considered (i.e. consideration of background is required for criteria pollutants). Cumulative impacts have been assessed by combining the Modification Proposal with existing ambient air quality and other approved future sources of local air emissions. The impact assessment criteria for 'air toxics' are applied at, and beyond the site boundary and reported as the 99.9th percentile of the dispersion modelling predictions. Only incremental impacts for these pollutants need be reported. Air toxics include the various VOC components of diesel exhaust emissions (benzene, 1-3-butadiene and PAHs).

Assessment of impacts for construction phase

Emissions estimation

The importation of fill and works associated with the Moorebank Avenue upgrade have the potential to generate dust emissions from the following activities:

- Hauling of imported fill material along unsealed haulage routes.
- Trucks unloading fill material.
- Fill material re-handle using dozers and excavators.
- Vegetation clearing and topsoil stripping.
- Graders on internal road construction.
- Wind erosion from exposed surfaces and stockpiles.

Emission factors developed by the US EPA² have been applied to estimate the amount of dust generated by each activity, based on approximately 600,000 cubic metres (1,320,000 tonnes) of imported general fill for bulk earthworks will be placed, stockpiled, spread and compacted across the MPE site.

To enable quantification of emissions, the following general assumptions are made, however it is noted that for the Concept Approval, specific details are not confirmed at this stage. For each detailed assessment during the staged approval process, the following assumptions would be reviewed and updated, as required.

- Four dozers are assumed to operate 11 hours per day at 70% utilisation on site preparation, vegetation clearing, topsoil stripping.
- Two graders are assumed to operate 11 hours per day at 70% utilisation on road construction.
- Emissions from hauling are estimated based on a haul route travel distance of 3 km for each trip. Each truck is assumed to import 50 tonnes of fill, corresponding to approximately 26,400 trucks per annum or approximately 220 return trips per day.
- Emissions from material handling is based on 1,320,000 tonnes being re-handled up to 4 times (i.e. trucks unloading, front end loaders (FEL) or excavators re-handling).
- Approximately 30% of the imported fill would be crushed / screened.

¹ 'Criteria pollutants' is used to describe air pollutants that are commonly regulated and typically used as indicators for air quality. In the Approved Methods the criteria pollutants are TSP, PM₁₀, NO₂, SO₂, CO, ozone (O₃), deposition dust, hydrogen fluoride and lead.

² United States Environmental Protection Agency (US EPA) AP-42 Compilation of Air Pollutant Emission Factors (US EPA, 1998b, US EPA, 2004, US EPA, 2006)

- A total area of 35 hectares is assumed as exposed for wind erosion.
- Water carts are used to control emissions from hauling, graders and for dozers pushing fill material. A control of 75% is assumed for watering on haul roads and 50% for graders and dozers. An additional control of 40% is applied to hauling, to account for speed limits keeping average vehicle travel speeds to 40km/hr (Foley et al, 1996) (combined control of 85%).

Emissions from onsite diesel consumption are estimated based on a combined daily diesel consumption of 400 litres per hour, with all equipment assumed to operate for 11 hours per day at 70% utilisation. US EPA Tier 1 emission factors (kg/kL) for non-road equipment are used to estimate emissions. Diesel exhaust emissions associated with on-road trucks are also estimated using aggregated emission factors developed by the NSW EPA for the 2008 GMR emissions inventory (NSW EPA, 2012b) which are incorporated into the EPA’s Air Quality Appraisal Tool (AQAT) (PAEHolmes, 2013). A return trip distance of 3 km is assumed and 220 heavy vehicles trips per day. A summary of the estimated emissions for construction aspects of the Modification Proposal is presented in **Table 5**.

Table 5: Emissions estimates for construction activities (kg/annum)			
Source / Activity	TSP	PM₁₀	PM_{2.5}
Hauling on unsealed roads	22,447	7,210	577
Trucks unloading fill	456	216	32.7
Material handling (excavators, FEL, stockpiles)	456	863	32.7
Dozers (vegetation stripping, topsoil clearing, fill)	10,483	4,421	1,101
Crushing	238	107	19.8
Screening	436	147	9.9
Graders on road construction	4,963	1,734	154
Wind erosion	29,750	14,875	2,231
Diesel combustion (onsite equipment)	733	733	692
On-road trucks diesel combustion	36.5	36.5	35.4
Total	69,998	30,342	4,885

Impact assessment

The modelling predictions for construction activities associated with the Modification Proposal are presented in **Table 6** (presented as an incremental increase). The modelling results indicate that the construction phase emissions for the Modification Proposal comply with all relevant impact assessment criteria. The maximum predicted increase in annual average PM₁₀ (0.4 µg/m³), PM_{2.5} (0.1 µg/m³), TSP (0.6 µg/m³) and dust deposition (0.3 g/m²/month) are considered minor when compared against existing background conditions. The highest predicted short-term impacts occur at the Joint Logistics Unit (north of the site), with a maximum 24-hour PM₁₀ of 4.2 µg/m³ and maximum 24-hour PM_{2.5} of 1.3 µg/m³.

Cumulative predictions are also presented in **Table 6** and represent the construction of the Modification Proposal and the baseline or background air quality for the area. For cumulative 24-hour impacts, modelling predictions are paired with daily background PM₁₀ and PM_{2.5} concentrations. The background dataset contains existing exceedances of the impact assessment criteria (three days for PM₁₀ and two days for PM_{2.5}). The cumulative 24-hour average PM₁₀ is therefore presented as the 4th highest (excluding the three days already over) and the cumulative 24-hour average PM_{2.5} is presented as the

3rd highest (excluding the two days already over). The results indicate that the construction for the Modification Proposal would result in no additional days over the criteria.

The annual average background concentrations of PM_{2.5} already exceed the NEPM AAQ reporting standard, therefore cumulative predictions are also above the standard at all receptors. It is noted, however, that the Modification Proposal results in a relatively minor increase in annual average PM_{2.5} (<0.1 µg/m³ at all sensitive receptors).

Assessment of impacts for operational phase

The main operational change for the Modification Proposal that differs from what was assessed in the Concept Plan Approval AQIA, relates to traffic movements on internal roadways. In the Concept Plan Approval AQIA, traffic movements were assessed along Moorebank Avenue and within the IMT. Under the Modification Proposal, the internal road 1 and 2 and service roads throughout the MPE site, would be used by both light and heavy vehicles.

Emission factors for vehicles in travel mode are expressed in g/km. The distance travelled in a given hour (or day) is based on the number of traffic movements and total travel distance per trip. For the Concept Plan Approval, the total travel distance assumed for emission estimation was 3 km and was combined with the average daily traffic (ADT) movements based on a container throughput of 1,000,000 TEU. The proposed changes to traffic movements on internal roadways for the Modification Proposal will not change these assumptions (travel distance or ADT movements) and therefore the Modification Proposal will not change the modelling results or conclusions presented in the Concept Plan AQIA. No further assessment is presented therefore in this report. It is noted that traffic movements on internal and external roadways will also be assessed for each staged approval.

Table 6: Construction phase – modelling predictions for selected sensitive receptors

Receptor	PM ₁₀ (µg/m ³)			PM _{2.5} (µg/m ³)			TSP (µg/m ³)			Dust Deposition		
	24-Hour Max		Annual Ave	24-Hour Max		Annual Ave	Annual Ave		Annual Ave	Incremental increase	Cumulative	
	Incremental increase	Cumulative	Incremental increase	Incremental increase	Cumulative	Incremental increase	Cumulative	Incremental increase	Cumulative	Incremental increase	Cumulative	
Goal	50 µg/m ³	30 µg/m ³	25 µg/m ³	8 µg/m ³	90 µg/m ³	2g/m ² /m	4g/m ² /m					
Receptor Max												
R1	4.2	48.9	0.4	19.8	1.3	23.6	0.1	8.3	0.6	49.0	0.3	1.3
R2	0.4	48.1	0.1	19.4	0.1	23.6	0.02	8.2	0.1	48.5	0.03	1.0
R3	0.5	48.2	0.1	19.5	0.2	23.6	0.03	8.2	0.1	48.5	0.04	1.0
R4	1.7	48.2	0.1	19.5	0.6	23.6	0.03	8.2	0.2	48.6	0.06	1.1
R5	1.9	48.1	0.1	19.5	0.6	23.6	0.03	8.2	0.1	48.5	0.05	1.1
R6	1.0	47.9	0.0	19.4	0.3	23.6	0.01	8.2	0.1	48.5	0.03	1.0
R7	0.7	47.9	0.1	19.4	0.2	23.6	0.01	8.2	0.1	48.5	0.03	1.0
R8	0.3	47.9	0.0	19.4	0.1	23.6	0.01	8.2	0.0	48.4	0.01	1.0
R9	0.2	47.9	0.0	19.4	0.1	23.6	0.01	8.2	0.0	48.4	0.01	1.0
R10	0.3	47.9	0.0	19.4	0.1	23.6	0.01	8.2	0.0	48.4	0.01	1.0
R11	0.1	47.9	0.0	19.4	0.1	23.6	0.01	8.2	0.0	48.4	0.01	1.0
R12	0.9	48.2	0.1	19.5	0.3	23.6	0.03	8.2	0.1	48.5	0.05	1.0
R13	3.0	48.4	0.3	19.6	0.9	23.6	0.07	8.3	0.4	48.8	0.19	1.2
R14	3.4	48.4	0.3	19.7	1.0	23.6	0.08	8.3	0.5	48.9	0.24	1.2
R15	1.2	48.7	0.2	19.6	0.4	23.6	0.06	8.3	0.3	48.7	0.10	1.1
R16	0.2	47.9	0.0	19.4	0.1	23.6	0.01	8.2	0.0	48.4	0.01	1.0
R17	0.3	47.9	0.0	19.4	0.1	23.6	0.00	8.2	0.0	48.4	0.00	1.0
R18	1.6	48.3	0.2	19.5	0.5	23.6	0.05	8.3	0.3	48.7	0.10	1.1
R19	0.3	48.0	0.1	19.4	0.1	23.6	0.01	8.2	0.1	48.5	0.01	1.0
R20	0.3	47.9	0.0	19.4	0.1	23.6	0.00	8.2	0.0	48.4	0.00	1.0
R20	0.2	47.9	0.0	19.4	0.0	23.6	0.00	8.2	0.0	48.4	0.00	1.0

Table 6: Construction phase – modelling predictions for selected sensitive receptors

Receptor	PM ₁₀ (µg/m ³)				PM _{2.5} (µg/m ³)				TSP (µg/m ³)			Dust Deposition		
	24-Hour Max		Annual Ave		24-Hour Max		Annual Ave		Annual Ave		Annual Ave		Annual Ave	
	Incremental increase	Cumulative	Incremental increase	Cumulative	Incremental increase	Cumulative	Incremental increase	Cumulative	Incremental increase	Cumulative	Incremental increase	Cumulative	Incremental increase	Cumulative
Goal	50 µg/m ³	30 µg/m ³	25 µg/m ³	8 µg/m ³	90 µg/m ³	2g/m ² /m	4g/m ² /m							
Receptor Max														
R21	4.2	48.9	0.4	19.8	1.3	23.6	0.1	8.3	0.6	49.0	0.3	1.3		
R22	0.2	47.9	0.0	19.4	0.1	23.6	0.00	8.2	0.0	48.4	0.00	1.0		
R23	2.3	48.2	0.2	19.5	0.7	23.6	0.05	8.3	0.3	48.7	0.13	1.1		
R24	1.7	48.1	0.1	19.5	0.5	23.6	0.04	8.3	0.2	48.6	0.10	1.1		
R25	0.4	47.9	0.0	19.4	0.1	23.6	0.01	8.2	0.0	48.4	0.01	1.0		
R26	0.9	47.9	0.1	19.4	0.3	23.6	0.01	8.2	0.1	48.5	0.03	1.0		
R27	0.5	47.9	0.0	19.4	0.2	23.6	0.01	8.2	0.0	48.4	0.01	1.0		
R28	1.3	48.2	0.1	19.4	0.4	23.6	0.01	8.2	0.1	48.5	0.03	1.0		
R29	0.7	47.9	0.0	19.4	0.3	23.6	0.01	8.2	0.0	48.4	0.01	1.0		
R30	0.2	48.0	0.0	19.4	0.1	23.6	0.01	8.2	0.0	48.4	0.01	1.0		
R31	0.2	47.9	0.0	19.4	0.1	23.6	0.01	8.2	0.0	48.4	0.01	1.0		
R32	0.1	47.9	0.0	19.4	0.0	23.6	0.01	8.2	0.0	48.4	0.01	1.0		
R33	0.2	47.9	0.0	19.4	0.0	23.6	0.01	8.2	0.0	48.4	0.01	1.0		
R34	0.2	47.9	0.0	19.4	0.0	23.6	0.01	8.2	0.0	48.4	0.01	1.0		
R35	4.2	48.9	0.4	19.8	1.3	23.6	0.11	8.3	0.6	49.0	0.30	1.3		
R36	0.2	47.9	0.0	19.4	0.1	23.6	0.00	8.2	0.0	48.4	0.00	1.0		
R37	1.8	48.2	0.1	19.5	0.5	23.6	0.03	8.2	0.2	48.6	0.07	1.1		
R38	0.9	48.1	0.1	19.5	0.3	23.6	0.03	8.2	0.1	48.5	0.05	1.1		

Mitigation measures

Mitigation measures identified within the MPE Concept Plan Approval and associated Statement of Commitments that are relevant to air quality, and which would apply to the Modification Proposal, are listed in **Table 7**. These are considered adequate for the Modification proposal and no additional measures are proposed.

Table 7: Mitigation measures		
Reference	Condition of Approval / Statement of Commitment	Timing
Schedule 3, Part 2.1 of approval instrument	<p>Any future Development Application shall include a comprehensive air quality impact assessment for each stage of the proposal, including:</p> <ul style="list-style-type: none"> a) An assessment in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (2005) (or its later version and updates; b) Taking into account the final project design with consideration to worst-case meteorological and operating conditions; c) Quantitatively assessing the predicted emission of: <ul style="list-style-type: none"> i. Solid particles; ii. Sulphur oxides; iii. Nitrogen oxides; and iv. Hydrocarbons. d) Assessing cumulative air impacts at a local and regional level (including but not limited to contemporaneous operations such as those of the proposed Commonwealth Government MIT; and e) A comprehensive air quality management plan that includes at least the following information: <ul style="list-style-type: none"> i. Explicit linkage of proposed emission controls to the site specific best practice determination assessment and assessed emissions; ii. The timeframe for implementation of all identified emission controls; iii. Proposed key performance indicator(s) for emission controls; iv. Proposed means of air quality monitoring including location (on and off-site), frequency and duration; v. Poor air quality response mechanisms; vi. Responsibilities for demonstrating and reporting achievement of key performance indicator(s); vii. Record keeping and complaints response register; and viii. Compliance reporting. 	Part 4, Division 4.1 State Significant Development EIS
SoC (air quality)	<p>The Proponent will undertake an air quality monitoring programme during the initial phases of both construction and operation of the SIMTA site in accordance with the Air Quality Impact Assessment and including:</p> <ul style="list-style-type: none"> • Nuisance Dust • Air Emissions – PM₁₀ and Nitrogen Dioxide 	Within 12 months of commencing operation and within 12 months of operating at an annual throughput of 500,000 TEU and 1,000,000 TEU

Table 7: Mitigation measures		
SoC (air quality)	The Proponent shall consider the need to develop a vehicle efficiency and emissions reduction program for the facility to encourage good maintenance and efficient vehicle selection, taking into account the results of the air quality monitoring programme.	Within 12 months of commencing operation and within 12 months of operating at an annual throughput of 500,000 TEU and 1,000,000 TEU
SoC (air quality)	The Proponent commits to the preparation of a Construction Environmental Management Plan prior to the construction of each stage to provide air quality and dust management mitigation procedures to be adopted during each of the construction phases of the development.	Prior to construction
SoC (air quality)	The Proponent commits to the preparation of a Greenhouse Gas Management Plan for the three major stages of the development in accordance with the provisions of the Greenhouse Gas Assessment.	Provide with the planning applications for the three major stages of the Concept Plan

Conclusion

The Modification Proposal includes changes that may alter local air quality, changing the results of the AQIA for the Concept Plan Approval, including construction activities relating to the importation of clean general fill (approximately 600,000m³), Moorebank Avenue roadworks and operational phase changes associated with traffic movements on internal roadways. Emission estimates and modelling is updated to assess the impact of these changes on local air quality.

Modelling results for the additional construction phase emissions for the Modification Proposal demonstrate compliance with the impact assessment criteria and ambient air quality standards for all pollutants and averaging times. For the operational phase, no change to the modelling or conclusions presented in the AQIA for the Concept Plan Approval is expected. In summary, the Modification Proposal is consistent with the existing MPE Concept Plan Approval.



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References

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Figure 1: Receptor locations