

# MOOREBANK LOGISTICS PARK

## Moorebank Precinct East: Six-Monthly Operations Compliance Report

Report: #2

Period: November 2020 – May 2021

15 JUNE 2021

# SYDNEY INTERMODAL TERMINAL ALLIANCE

November 2020 – May 2021

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## REVISIONS

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## KEY TERMS AND ACRONYMS

Acronym/Term	Meaning
CNBMP	Container Noise Barrier Management Plan
CoC	Conditions of Consent
DPIE	Department of Planning, Industry and Environment (previously Department of Planning and Environment)
DPI&E	Department of Planning, Industry and Environment
EPBC Act	Environmental Protection and Biodiversity Conservation Act 1999
ERP	Emergency Response Plan which includes the Bushfire Emergency and Evacuation Plan (BEEP), Bushfire Management Plan (BMP) and Flood Emergency Management Plan (FEMP)
IMEX	Import Export
MLP	Moorebank Logistics Park
OAQMP	Operational Air Quality Management Plan
OCR	Six Monthly Operational Compliance Report
OCCS	Operational Community Communication Strategy
OEMP	Operational Environmental Management Plan
ONVMP	Operational Noise and Vibration Management Plan
OTAMP	Operational Traffic and Access Management Plan
OWRMP	Operational Waste and Resource Management Plan
POCR	Pre-operations Compliance Report
POPD	Program for Operational Phase Delivery
SIOMP	Operational Stormwater Infrastructure and Operation and Maintenance Plan
SSD	State Significant Development
UDLP	Urban Design and Landscape Plan
WTP	Workplace Travel Plan
SSD 6766	Stage 1 of the MPE Concept Approval (MP 10_0193) as approved under SSD 6766. It involves the construction and operation of an IMEX terminal and associated Rail Link.
SSD 7628	Stage 2 of the MPE Concept Approval (MP 10_0193) as approved under SSD 7628. It involves the construction and operation of warehousing and distribution facilities on the MPE site and upgrades to approximately 1.5 kilometres of Moorebank Avenue from approximately 35 metres south of the northern boundary of the MPE site to approximately 185 metres south of the southern MPE site boundary.

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## 1 EXECUTIVE SUMMARY

In accordance with SSD 7628 Condition of Consent (CoC) C21(c)(iii), a Six-monthly operational compliance report (OCR) must be prepared.

The Department of Planning, Industry and Environment (DPIE) was notified on 24 February 2020, that SIMTA intends to commence the staged operation of the MLP East Precinct in Area 2 on 13 March 2020. Area 2 encompasses Warehouse 3, 4 and 5 (approved under SSD 7628 MPE Stage 2).

This OCR has been prepared in accordance with the requirements of the *Compliance Reporting Post Approval Requirements (NSW DP&E, June 2018)* and has been prepared to outline the progress of compliance for all operational requirements against the Project Approvals from November 2020 – May 2021.

The Department approved the Program for Operational Phase Delivery (POPD) on 21 May 2019 which outlined the staged submission of operational documents under condition A14 of SSD 7628. The Department also considered the combining of strategies, plans or programs to be acceptable, provided that all relevant conditions across both SSD 6766, and SSD 7628 are met.

Regular reviews of compliance against the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC 2011/6229) Conditions of Approval are undertaken but are not the subject of this compliance report.

## 1 INTRODUCTION

### 1.1 Project Overview

Application Number	
<b>Project name:</b>	Moorebank Logistics Park – Operational Area 1
<b>Proponent</b>	Qube Holdings (Qube)
<b>Site Address</b>	MLP East Precinct site, Moorebank Avenue, Moorebank
<b>Project Phase</b>	Six Monthly Operation Compliance Report (OCR)
<b>Project Activity</b>	Operation of an import-export terminal, rail link and warehouse and distribution facilities and associated infrastructure.
<b>Report date</b>	Tuesday, 15 June 2021

### 1.2 Project Approvals

Approval for the construction and operation of the MLP East Precinct was obtained progressively as follows:

- SIMTA Moorebank Intermodal Terminal Facility dated 6 March 2014 (EPBC 2011/6229)
- Moorebank Precinct East (MPE) Concept Approval – 10\_0193
- MPE Stage 1 – SSD 6766
- MPE Stage 2 – SSD 7628
- MPE Stage 2 – SSD 7628 – Subdivision partial development consent
- MPE Stage 2 – SSD 7628\_MOD 2 – Modification 2 boundary adjustment and basin 9 design adjustment
- MPE Stage 2 – SSD 7628\_MOD 3 – Modification 3
- MPE Stage 2 – SSD 7628\_MOD 3 – Modification 4

### 1.3 Scope and Purpose

In accordance with SSD 7628 Condition C21 (c) (iii), a Six-Monthly Operation Compliance Report (OCR) is required to outline progress of compliance for all operation requirements against the MPE Stage 1 and Stage 2 approval.

There is no specific requirement under SSD 6676 for the submission of an OCR, however this report has been prepared to address the operational requirements for both SSD 6766 and SSD 7628 and has been prepared in accordance with the requirements of the *Compliance Reporting Post Approval Requirements* (NSW DP&E, June 2018).

## 2 PROJECT DESCRIPTION

### 2.1 Site Location

The Moorebank Logistic Park (MLP) is an integral component of the Freight, Ports and Transport strategies of both the NSW and Commonwealth governments to help manage the challenges of an expected tripling of freight volumes at Port Botany by 2031.

The MLP aims to streamline the freight logistics supply chain from port to store, deliver savings to businesses and consumers, and help service the rapidly growing demand for imported goods in south-west Sydney. It is located approximately 27 kilometres (km) south-west of the Sydney Central Business District and approximately 26 km west of Port Botany within the Liverpool Local Government Area. The MLP is divided into an East Precinct and a West Precinct, located east and west of Moorebank Avenue, respectively.

The MLP East Precinct commenced operations in May 2020 and is the subject of this Operation Compliance Report (OCR), while the MLP West Precinct is still currently under construction.



Figure 1-1 MLP East Precinct Layout – sourced SIMTA MPE OEMP Rev 15

## 2.2 Scope of Works

The main features of the MLP East Precinct include:

- The Import Export (IMEX) Terminal. The IMEX Terminal comprises:
  - Truck processing, holding and loading areas with an entrance and exit from Moorebank Avenue.
  - Rail loading and container storage areas serviced by container handling equipment
  - An Administration facility and associated car parking with light vehicle access from Moorebank Avenue.
- A Rail Link connecting the IMEX terminal and the Southern Sydney Freight Line (SSFL) traversing Moorebank Avenue, Anzac Creek and Georges River.
- Associated ancillary infrastructure including signage, lighting, landscaping, water management.
- Warehouse and distribution facilities including warehousing up to 21 m in height, typically ranging in size from 20,000 m<sup>2</sup> to 62,000 m<sup>2</sup>. Individual warehouses typically comprise the following:
  - Office and administration facilities
  - Amenities
  - Car parking
  - Truck loading/unloading docks
  - Internal parking for pick-up and delivery vehicles (PUD)
  - Specialised sortation and conveyor equipment
  - Hardstand areas that provide trailer parking spaces, external PUD parking spaces, vehicle manoeuvring areas and access to the main internal site road
  - Signage for business identification purposes, including backlit illuminated signage on each warehouse
  - Internal fit out, comprising racking and storage.
- A freight village including a mix of retail, commercial and light industrial spaces typically up to 15 m in height and varying in size and design.
- An internal road network to enable efficient movement of vehicles, dispatch of freight from the warehouses and transport of containers between the IMEX Terminal and warehouse and distribution facilities.
- Security and Administration offices and demountables.

## 2.3 Operational activities undertaken

Documents can be submitted in stages as permitted by CoC A14 and CoC A15. The application of the operational documents will be staged to take progressive effect across the MLP East Precinct site as construction is completed and operations commences was detailed in the POPD approved by the DPIE on 21 May 2019.

This OCR has been prepared in accordance with the requirements of the Compliance Tracking Program (CTP) to outline progress of compliance for all operation requirements against both SSD 6766 and SSD 7628. This OCR covers the period from November 2020 to May 2021.

The following works have been undertaken:

- Movement and storage of containers in and out of the terminal via rail
- Truck processing, holding, and loading areas.
- Primary and secondary container loading/ unloading areas.
- Transfer of containers between terminal and warehouses vis internal transfer vehicles
- Pickup and delivery of goods to warehouses via truck movements

- Warehouses 1, 3a, 3b, 4a, 4b and 5 are occupied and operational.
- Warehousing and Administrative Activities
- Security, maintenance and monitoring of all infrastructure and equipment related to the above activities.

### 3 PROJECT COMPLIANCE SUMMARY

This OCR outlines the progress of compliance for all operational requirements against Project Approvals. Compliance against the project CoC and the Final Compilation of Mitigation Measures (FCMM) are outlined in SSD 6766 Conditions of Consent and SSD 7628 Conditions of Consent, Appendix A and B respectively.

A declaration of compliance is available in Appendix D.

Furthermore, an independent environmental audit was undertaken for SSD 6766 and SSD 7628 Development Consents for MPE Operations in May 2021. A copy of the audit report will be provided to DPIE once available.

#### 3.1 Environmental Monitoring

In accordance with the CoC and OEMP, environmental monitoring activities are required to be undertaken for the operation phase of the MPE Stage 1 and Stage 2 project. These activities include air quality monitoring, noise monitoring, storm water infrastructure and water quality monitoring, Biodiversity Monitoring, and Biannual trip and origin destination reports. A summary of the monitoring results is addressed in the following sections. The full reports on each of these monitoring requirements are available in Appendix C.

##### 3.1.1 Air Quality Monitoring

*Results during this reporting period are as follows:*

- No exceedances of the annual average criteria has occurred for either PM2.5, PM10 or NO2.
- No exceedances of the 1-hour average criteria or annual average criteria has occurred for NO2 or CO.
- Exceedances of the 24-hour average criteria occurred for PM2.5 and PM10
  - There were three exceedances (out of 181 days) of the PM2.5 24-hour average criteria during the reporting period (1.7%).
  - There were 10 exceedances (out of 181 days) of the PM10 24-hour average criteria during the reporting period (about 5.5%).
  - Most of the exceedances occurred in March 2021.
  - Hazard reduction burns occurred towards the end of April 2021, impacting air quality.
  - The majority of exceedances occurred when no trains were entering or exiting.
  - The exceedances mostly correlate to higher readings during the evening and early morning periods.
  - Investigations at MLP Precinct East upon receipt of the exceedances has not identified significant dust or emissions issues from MLP Precinct East.
  - Most exceedances were recorded at AQM02 which is the monitor located on the eastern boundary. Exceedances at AQM02 predominantly occurred in March 2021. Causes of the recorded exceedance is unclear as Warehouse 3 and Warehouse 4 are sealed and no OOHW's have been undertaken during the reporting period.
  - MPW Stage 2 has approval to receive imported material outside of standard construction hours. Import of material was occurring at times during December 2020 and January 2021, although was unlikely to contribute to the exceedances at AQM03.
  - AQM01 is the monitor located closest to the MLP Precinct East rail siding. As shown in Table 4-2 and Table 4-3, no exceedances were recorded at AQM01, and as such it is unlikely that operations at MLP Precinct East are impacting air quality in the immediate area.
  - AQM04 was offline for a large time affecting reporting outcomes. It is noted that the monitor is back online as of May 2021.
  - AQM03 has experienced some low availability during the reporting period. It is noted that this monitor has now been removed from site for maintenance.

The Six-Monthly Compliance Operational Air Quality reports completed during this period are available in appendix C of this report.

##### 3.1.2 Noise Monitoring

These measurements have been performed, consistent with the requirements of the NSW Industrial Noise Policy (EPA, 2000) and the Operational Noise and Vibration Management Plan1. Airborne noise measurements were performed at the four potentially most affected residential receivers in the vicinity of the

MLP. The representative receivers are located in the suburbs of Casula, Glenfield, Wattle Grove and Wattle Grove North (see Figure 3). Daytime construction noise is currently occurring at the MLP site. Construction noise has been excluded from the assessment.

Results during this reporting period:

Based on the attended measurement results detailed in the reports from Q4 2020 and Q1 2021, it can be seen that the measured LAeq(15minute) noise levels at all locations and during all measurement periods were above the 35 dB(A) noise limit. At Location M1 (Wattle Grove), the closest measurement location to the MLP, the measured LAeq(15minute) noise level during the quietest period, MLP noise emissions were not audible.

In all cases, the measured LAeq(15minute) noise levels were dominated by extraneous noise sources apart from the MLP operations. Noise sources from MLP operations were not audible during any of the measurement periods at all four representative measurement locations. Since MLP noise emissions were not audible, it was not possible to estimate the industrial noise contribution from the MLP facility.

Based on the results of the attended noise measurements performed during the day, evening and night-time periods in December 2020 and March 2021, it is concluded that the current noise levels comply with the operational noise limits in SSD 7628.

Noise monitoring reports completed during this period are available in appendix C of this report.

### 3.1.3 Storm Water Infrastructure and Water Quality Monitoring

Storm water infrastructure maintenance was carried out as per the SIOMP. The stormwater infrastructure system discharges water into the natural drainage system via discharge points approved by the EPL. Site data was collected at the monitoring points, following Australia and New Zealand guidelines for fresh and marine water quality – 2000 (ANZECC Guidelines), In situ water quality parameters relevant to stream health and aquatic assessment profiling were collected in field with a multiparameter hand-held water quality monitoring probe (Aquatroll 600). Measures taken:

- pH
- Dissolved Oxygen
- Electrical Conductivity
- Water Temperature and
- Turbidity

Water samples were collected at each discharge point and sent to Australian Laboratory Services (ALS) for analysis. The following water chemical sampling is undertaken for a range of nutrients, metals, and hydrocarbons relevant to stream health and aquatic assessment protocol, key nutrients, metals, and pollutants are listed below:

- Total phosphorous
- Total Nitrogen
- Kjeldahl Nitrogen
- Dissolved Metals
- PFAS
- Total Suspended Solids
- Total Hydrocarbons

Results during this reporting period:

#### Key Results

A significance increase in total nitrogen and Kjeldahl nitrogen has been observed across each of the discharge points. This has resulted in an exceedance of Anzecc guidelines trigger values, most notably at discharge points 5 and 7. A similar trend has been observed for total phosphorous presence in the samples across all sites.

### Event Relativity

A significant rainfall event during the month prior to testing occurred which may have had a significant effect regarding the concentrations of nitrogen and phosphorous within the drainage system. Large rainfall events will stimulate excessive runoff from broader expanses of the flood plain, which can be responsible for the collection, mobilisation and influx of increased nutrient concentrations. The excess nutrients liberated by such an event are often derived from land management inputs such as fertiliser application, disturbance of soils due to extensive earthworks and gross pollutants which accumulate within the surrounding landscape.

### Increased Nutrient Concentrations

Excess nitrogen in a waterway can lead to harmful algal blooms, reducing oxygen levels to significantly impact biota and ecosystems.

Increased phosphorus levels can cause increased growth of algae and large aquatic plants, which can result in decreased levels of dissolved oxygen, accelerating the process of eutrophication.

To ensure the increased levels of such nutrients are not persistent to the, it is recommended that each site be tested again and more frequently in the coming months.

It may also be advantageous to undertake visual inspection monitoring sites along Anzac Creek corridor and within the nearby confluences with the Georges River to identify if the increase in nutrient concentrations is facilitating algal blooms.

### Hydrocarbons

We have established (No trend variances) in Hydrocarbon concentrations across the current data sample.

Recorded values for hydrocarbons within the stormwater network are interpreted as being static and remain under the accepted thresholds determined for the compliance standard.

•The derived data values were compared to the default trigger values (DTVs) recommended by ANZECC/ARMCANZ (2000) for the protection of slightly disturbed lowland river ecosystems in southeast Australia.

### Metals

During the October 2020 water testing period, copper levels at discharge Points 1,5 &7 exceeded the ANZECC 2000 trigger value. Copper values have decreased to an acceptable concentration at each site, though further monitoring with a focus upon data trend analysis for copper concentration as part of the future water quality programs is recommended.

A spike in Cadmium, Chromium and Zinc has been observed at DP5 & DP 7. Concentrations of each dissolved metal exceed Anzecc trigger values.

Because of their high degree of toxicity, arsenic, cadmium, chromium, lead, and mercury rank among the priority metals that are of public health significance.

It is recommended that this marginal increase in concentration for Cadmium, Chromium and Zinc will be monitored closely over coming water quality monitoring programs to determine if increased concentrations continue.

DP5 & DP7 form part of a network of bioswales and detention basins which are designed to regulate and reduce the flow of water and thereby to harvest and filter excess suspended and mobilised pollutants which may attribute higher concentration's for heavy metal particulates of the site.

DP 5 and DP 7 are an outlet point draining into Anzac Creek.

To understand the effectiveness of metal concentration harvesting and accumulation within the stormwater network function monitored by this discharge point It is recommended that WQM data from DP5 and DP7 be correlated with WQM data sampled within Anzac creek to determine if consistent results for metal concentrations are found across the datasets.

Water quality monitoring report and infrastructure inspection reports are available in Appendix C of this report.

## 3.1.4 Biodiversity Monitoring

Management of flora and fauna values within the MPE operational facility and associated lands is reviewed on an annual basis following a series of detailed monitoring surveys. The core objectives of flora and fauna monitoring is to:

- Monitor protected threatened flora species.

- Monitor protected vegetated areas adjacent to the operational facility (including EPBC offset areas)
- Monitoring to minimise harm to fauna and maintain habitat offsets (nest boxes)
- Monitor works to protect and improve riparian and aquatic environments.
- Monitor for weed occurrence and recruitment within operational site.

The results of flora and fauna monitoring across the MPE operational facility is the subject of the Annual Flora and Fauna Monitoring Report. This report is provided in full in Appendix C.

A series of recommendations are included to rectify any management issues identified during monitoring and enhance the biodiversity values within the MPE operational facility.

Results during this reporting period:

**Weed occurrence in MPE operational facility and Rail Link;**

Priority weeds within the operational Rail Link and at northern extent of operational facility	Remove all scattered occurrences of priority weed species (Alligator weed, Ludwigia, Lantana, African Olive, Bridal Creeper, Fireweed) through the Rail Link and operational facility to prevent further spread:
Encroachment and increased coverage of weeds with remediated areas and sparsely vegetated soft landscaped areas.	Revegetation of remediated areas within the Rail Link and for sparsely vegetated areas surrounding onsite detention basins and drainage swales at the northern extent of the operational facility. Revegetation should use a native species seed palette or tube stock plantings and should be prioritised for the Autumn months. Revegetation works should be undertaken in accordance with the approved UDLPs (Arcadis 2019, Arcadis 2020b)

**EPBC threatened flora offset sites;**

Patch of the woody weed Camphor Laurel with offset site P4	Bush regenerators to remove occurrence of Camphor laurel.
Encroaching Blackberry at offset site P4	Blackberry infestation should be monitored and controlled as necessary to prevent encroachment into the offset site.
Increased coverage of African Love Grass along the edges of offset sites P1, P2, P3 and encroaching on offset site G1	Monitor occurrences of African Love Grass adjacent to and within offset sites. If this invasive grass species is thought to be having a negative impact upon Small-flower Grevillea, Nodding Geebung or their habitats weed control works maybe implemented. Manual control methodologies should be prioritised unless a targeted herbicide treatment, that has no risk of over spray or off target poisoning, can be used. An example of a selective herbicide that may be suitable for control of African Lovegrass within offset areas is Flupropanate granular herbicide.
Native plant species outcompeting Nodding Geebung and Small-flower Grevillea (i.e. smothering, occupying habitat)	Monitoring of Nodding Geebung and Small-flower Grevillea population over the following year to determine whether the distribution of individuals is changing as a result of increased coverages of exotic or native vegetation Juvenile Nodding Geebung in plots P1, P2 and P3 should be monitored for smothering from native plant species. Any native plants observed to be crushing or smothering individuals should be cut back. i.e. Slender Devils Twine observed on juvenile Nodding Geebung should be removed. NOE: Native plants/vegetation in the immediate vicinity of Nodding Geebung which are not crushing, or smothering individuals should not be removed as they provide protections from grazing herbivores and inclement weather.

**Riparian vegetation management: Georges River management site**

Increased weed coverage within revegetation areas	Bush regenerators should commence weed control works within the Georges River management site immediately. Weed control works should aim to support natural regeneration through removal of scattered weeds and weeds encroaching from infested areas adjacent to the management site.
Encroachment of weed species from adjacent areas of infested bushland	The installation of a sediment fence to limit the amount of weed seed being transported into the revegetated site should be considered if encroachment is continuing despite routine weeding exercises.

Bare patches between plantings on eastern side of Georges River	Encourage natural recruitment of native species by maintaining low levels of weeds in bare areas between plantings.
Infill planting through bare areas on the western side of Georges River.	Infill planting with native tube stock should be conducted in bare areas beneath the Rail Link bridge. Plantings should be commensurate with species present in the RFEFCF vegetation community.
Inadequate habitat connectivity beneath the Rail Link bridge	Review of rock ballast as the necessary means for erosion and sediment control beneath the Rail Link bridge. If rock ballast is not deemed necessary for the entire 20 metre wide gap, it should be removed and replaced with alternative soil stabilisation materials (i.e. coir logs, jute and coir mesh). Planting of native species should be undertaken in conjunction with installation of soft stabilisation materials as per the original habitat connectivity enhancement plan from the RVMP (Hyder 2015).
Installation of six-foot-high cyclone fence at the southern extent of management site restricting movement of fauna along the Georges River riparian corridor	A review of the fencing location and design should be conducted to determine whether it is necessary and/or whether it can be modified to allow the movement of fauna from the MLP site to bushland south of the site. Considerations should be made for the installation of crossing mechanisms for fauna (i.e. Koala bridges)

#### **Lands adjoining (within 10 metres of) the Rail Link**

Native vegetation, including an individual Bynoe's Wattle, was over sprayed with herbicide during weed control works conducted with the operational Rail Link.	Hi-volume spraying of herbicide within the Rail Link in areas adjacent to native vegetation (specifically the BA341 biobank site) should not be conducted in the future. Weed control works within these areas should include manual removal or spot spraying with herbicide. Spot spraying with herbicide should only be undertaken during optimal conditions to avoid spray drift.
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### **3.1.5 Biannual Trip and Origin Destination Report**

The Biannual trip and origin destination report completed for this period, have been provided to Secretary for information in accordance with B28.

## **3.2 Previous Report Actions**

The first Six-Monthly Operational Compliance Report had no actions identified. Ongoing actions being tracked will be reported in the next Six-Monthly Operational Compliance Report.

## **3.3 Incidents**

MPE Operations incident register is attached in appendix C.

## **3.4 Complaints Management**

No complaints were received relating to MPE operations in this period.

## **APPENDIX A - SSD 6766 CONDITIONS OF CONSENT**

COMPLIANCE REQUIREMENT	UNIQUE (ID)	COMPLIANCE REQUIREMENT	DEVELOPMENT PHASE	COMPLIANCE STATUS	EVIDENCE AND COMMENTS
SSD 6766	A1	The Applicant shall carry out the development generally in accordance with the: a. State Significant Development Application SSD 6766; b. SIMTA Intermodal Terminal Facility – Stage 1 – Environmental Impact Statement (Hyder Consulting Pty Ltd, May 2014); c. SIMTA Intermodal Terminal Facility – Stage 1 – Response to Submissions (Hyder Consulting Pty Ltd, September 2015); and d. The conditions of this consent.	All	Ongoing	To the extent it relates to MPE Stage 1.  All sources referred to are included in the project obligations register and OEMP.
SSD 6766	A2	In the event of an inconsistency between: a. the conditions of this approval and any document listed from condition A1(a) to A1(c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and b. any document listed from condition A1(a) to A1(c) inclusive, and any other document listed from condition A1(a) to A1(c) inclusive, the most recent document shall prevail to the extent of the inconsistency.	All	Ongoing	
SSD 6766	A3	The Applicant shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of: a. any reports, plans or correspondence that are submitted in accordance with this consent; and b. the implementation of any actions or measures contained within these documents.	All	Ongoing	
SSD 6766	A4	This approval will lapse ten years from the date of this approval unless works the subject of this approval are physically commenced, on or before that lapse date.	All	Compliant	
SSD 6766	A5	In the event of a dispute between the Applicant and a public authority, in relation to this approval, either party may refer the matter to the Secretary for resolution. The Secretary's resolution of the matter shall be binding on the parties.	All	N/A	There have been no disputes within this reporting period.
SSD 6766	A6	Any advice or notice to the consent authority shall be served on the Secretary	All	N/A	There have been no notices or advice within this reporting period.
SSD 6766	A7	The applicant shall ensure that all licences, permits, consents and approvals are obtained and maintained as required throughout the life of the development. No condition of this consent removes the obligation of the Applicant to obtain, renew or comply with such licences, permits or approvals. The Applicant shall ensure that a copy of this consent and all relevant environmental licences, permits, consents and approvals are available on the site that all times during the development and made available on the Project Website.	All	Ongoing	Required licences, permits, consents and approvals required prior to construction are being progressively obtained. E25 Report to be uploaded to Website once complete MP EPL to be uploaded to Website
SSD 6766	C19	The Applicant shall ensure that the construction and operation of the proposed development will not prevent the existing use of Moorebank Avenue as a public road to a standard commensurate to its current use prior to the development.  Note: temporary closures or part closures and changes to the operation of Moorebank Avenue may occur for limited periods during construction as detailed in the Construction Traffic Management Plan	All	Compliant	The OTAMP was approved 6/12/2019
SSD 6766	G1	Within 6 weeks of commencement of operation, unless otherwise agreed by the Secretary, the Applicant shall undertake road pavement deflection testing of the truck routes as defined by Condition E34(a). If the deflection tests show an increase in deflection as a result of the truck routes associated with construction, the Applicant shall undertake pavement rehabilitation of the affected road pavements to achieve the pavement deflection that existing prior to the commencement of works.	operation	Not Triggered	Condition Superseded by email 22/2/2019
SSD 6766	G2	Within 3 months of commencement of operation, unless otherwise agreed by the Secretary, the Applicant shall carry out rectification work to the extent of the damage resulting from the construction works at the Applicant's expense and to the reasonable requirements of the owners.	operation	Not Triggered	Condition Superseded by email 22/2/2019
SSD 6766	G3	Within 3 months of commencement of operation, the Applicant shall provide to the Certifying Authority evidence that all easements required by this approval, and other licences, approvals and consents, have been lodged for registration or registered at the NSW Land and Property Information.	operation	Not Triggered	
SSD 6766	G4	Signage shall be installed in accordance with Drawing A3001 Issue C (Terminal – Signage Details) dated 14/04/2015, unless otherwise agreed by the Secretary.	operation	Compliant	Signages with the Terminal are per approved detailed design drawings
SSD 6766	G5	The quantities of Dangerous Goods present at any time on the site or transported from and to the terminal site shall be kept below the screening threshold quantities listed in the Hazardous and Offensive Development Guidelines Applying SEPP 33, (DP&E 2011). The screening threshold quantities for each Dangerous Goods shall be defined in accordance with Table 1: Screening Methods of Applying SEPP 33.	operation	Ongoing	No Dangerous Goods have been transported during this reporting period

SSD 6766	G7	<p>The Applicant shall install and maintain a rail noise monitoring system on the rail link at the commencement of operation to continuously monitor the noise from rail operations on the rail link. The system shall capture the noise from each individual train pass by noise generation event, and include information to identify:</p> <ul style="list-style-type: none"> <li>a) Time and date of freight train passbys;</li> <li>b) Imagery or video to enable identification of the rolling stock during day and night;</li> <li>c) LAeq(15hour) and LAeq(9hour) from rail operations; and</li> <li>d) LAF(max) and SEL of individual train passbys, measured in accordance with ISO3095; or</li> <li>e) Other alternative information as agreed with the Secretary.</li> </ul> <p>The results from the noise monitoring system shall be publicly accessible from a website maintained by the Applicant. The noise results from each train shall be available on the website ideally within 24 hours of it passing the monitor. The LAeq(15hour) and LAeq(9hr) results from each day shall be available on the website within 24 hours of the period ending.</p> <p>Prior to the commencement of operation, the applicant shall submit for the approval of the Secretary, justification supporting the appropriateness of the location for rail noise monitoring including details of any alternative options considered and reasons for these being dismissed. The rail noise monitoring system shall not operate until the Secretary has approved the proposed monitoring location.</p> <p>The Applicant shall provide an annual report to the Secretary with the results of monitoring for a period of 5 years, or as otherwise agreed with the Secretary, from the commencement of operation of the IMEX terminal. The Secretary shall consider the need for further reporting following a review of the results for year 5.</p>	operation	Compliant	Covered in Annual Noise Review Report
SSD 6766	G7A	<p>The applicant shall install and maintain a wayside angle of attack monitoring system on the rail link at the commencement of operation to continuously monitor the angle of attack to the rail of rolling stock wheels. The system shall capture the angle of attack from a wheel on each axle of every train, and include information to identify:</p> <ul style="list-style-type: none"> <li>a) Time and date of each axle pass by; and</li> <li>b) The identification number of each item of rolling stock.</li> </ul> <p>The results from the angle of attack monitoring system shall be:</p> <ul style="list-style-type: none"> <li>• accessible by train operators from a website maintained by the Applicant. Angle of attack results from each train shall be available on the website within 24 hours of it passing the monitor, unless unforeseen circumstances have occurred.</li> <li>• included in a six-monthly report to the Secretary. The report should at least identify the number of wagons with wheels that exceed the ASA standard angle of attack and the action taken by operators to improve steering performance.</li> </ul> <p>Prior to the commencement of operation, the Applicant shall submit for the approval of the Secretary, justification supporting the appropriateness of the location for angle of attack monitoring, the format of the information to be accessible to operators and the format of the public report.</p> <p>The angle of attack monitoring system shall not operate until the Secretary has approved the proposed monitoring location and reporting arrangements.</p>	operation	Compliant	Covered in Annual Noise Review Report

SSD 6766	G7B	<p>The Applicant shall:</p> <p>(a) not less than three months and not more than twelve months from commencement of operation, engage an appropriately qualified and experienced acoustic engineer to undertake a night-time noise survey at Glenfield Farm (or an equivalent location if access is denied).</p> <p>(b) the noise survey shall be conducted in accordance with the EPA's Rail Infrastructure Noise Guideline 2013 to determine:</p> <p>(i) the contribution of any new rail traffic travelling to and from the development; and,</p> <p>(ii) the increase in the total rail traffic noise level caused by any new rail traffic to and from the development.</p> <p>(c) the noise survey shall be conducted for not less than 12 contiguous days in the winter months (July, August or September).</p> <p>(d) if as a result of the noise survey there is a sustained increase in the total rail traffic noise level due to the noise level from rail traffic travelling to and from the development of more than 2dB(A) for more than 30% of nights surveyed, the Applicant shall within twelve months, construct a noise barrier along the relevant sections of rail link in accordance with the specifications provided by an appropriately qualified and experienced acoustic engineer so as to limit the increase in the total rail traffic noise level at Glenfield Farm caused by any new rail traffic to and from the development to not exceed 2dB(A).</p> <p>(e) the report of the noise survey including the results and recommendations shall be provided to the Secretary.</p>	operation	Compliant	<p>The Locomotive Best Practice Review was developed in consultation with EPA and TfNSW and a final document has been issued, with confirmation from both parties that consultation comments have been closed out in the final report.</p> <p>This was approved by DP&amp;E on 17/09/2017</p> <p>The Moorebank Intermodal Terminal Project Best Practice Wagon Report (Condition G6B) was published on 16 April 2019 by Renzo Tonin and is currently in consultation with TfNSW</p> <p>Report submitted in 12 May 2021</p>
SSD 6766	G8	<p>The following measures must be implemented during operation:</p> <p>a) The use of top of rail friction modifiers and automatic rail lubrication equipment in accordance with ASA Standard T HR TR 00111 ST Rail Lubrication, where required; and</p> <p>b) Measures to ensure the rail cross sectional profile is maintained in accordance with ETN-01-02 Rail Grinding Manual for Plain Track to ensure the correct wheel / rail contact position and hence to encourage proper rolling stock steering.</p>	operation	Ongoing	Use of Automatic Rail Lubrication Equipment / Maintain Rail Cross Sectional Profile
SSD 6766	G10	Containers must be transferred between the site and Port Botany predominantly by rail, unless where unforeseen circumstances have occurred (e.g. an incident, breakdown, derailment or emergency maintenance on the rail line). The Secretary may at any time request the Applicant to demonstrate that the transport of containers between the site and Port Botany container terminals is by rail. This is to be demonstrated upon request by the Secretary for the prior 12 month period.	operation	Ongoing	Containers are to be transferred by rail unless there is track maintenance or unforeseen circumstances
SSD 6766	G11	<p>The Applicant shall prepare a six-monthly report to the Secretary with the results of container and vehicle monitoring for a period of 3 years, or as otherwise agreed with the Secretary, from the commencement of operation of the IMEX terminal. The Secretary shall consider the need for further reporting following a review of the results for year 3. The report shall include:</p> <p>a) The number of twenty foot equivalent units dispatched and received during the period;</p> <p>b) A record of heavy vehicle entry by date and approximate time; and</p> <p>c) The number of light vehicles turning right into the terminal site from Moorebank Avenue and turning left from the terminal site onto Moorebank Avenue for a representative day.</p>	operation	Compliant	Part of BTODR
SSD 6766	G12	All containers handling equipment, purchased after 2019 must meet US EPA Tier 4 or EU Stage IV emission standard or achieve an equivalent emission control performance to those standards listed in this condition.	operation	Ongoing	
SSD 6766	G13	The Applicant must carry out any activity, or operate any plant, in or on the premises by such practicable means as may be necessary to prevent or minimise air pollution.	operation	Ongoing	Continuous air monitoring is ongoing
SSD 6766	G14	Heavy road freight vehicles are not permitted to use Moorebank Avenue south of the East Hills Railway corridor. A main gate monitoring system (e.g. CCTV) shall be installed to identify heavy vehicles turning left from the terminal site onto Moorebank Avenue, or turning right from Moorebank Avenue to the terminal site. The Secretary may at any time request the Applicant to provide a heavy vehicle monitoring report for the prior 12 month period.	operation	Compliant	No heavy road freight vehicle from the project has been identified using the East Hills Railway Corridor

SSD 6766	G15	<p>Within 12 months of the commencement of operation of the project, or as otherwise agreed by the Secretary, the Applicant shall undertake operational noise monitoring to compare actual noise performance of the project against noise performance predicted in the review of noise mitigation measures predicted in documents specified under condition A1 of this approval, and prepare an Operational Noise Report to document this monitoring. The Report shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>a) noise monitoring to assess compliance with the operational noise levels predicted in documents specified under condition A1 of this approval;</li> <li>b) a review of the operational noise levels in terms of criteria and noise goals established in the NSW Road Noise Policy (EPA, 2011);</li> <li>c) sleep disturbance impacts compared to those determined in Condition E25;</li> <li>d) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which project noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers;</li> <li>e) details of any complaints and enquiries received in relation to operational noise generated by the project between the date of commencement of operation and the date the report was prepared;</li> <li>f) any required recalibrations of the noise model taking into consideration factors such as actual traffic numbers and proportions;</li> <li>g) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of all feasible and reasonable mitigation measures; and</li> <li>h) identification of additional feasible and reasonable measures to those predicted in the documents specified under condition A1 of this approval, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Noise Policy (EPA, 2011), when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA.</li> </ul> <p>The Applicant shall provide the Secretary and the EPA with a copy of the Operational Noise Report within 60 days of completing the operational noise monitoring referred to in (a) above or as otherwise agreed by the Secretary.</p>	operation	Compliant	Covered in Annual Noise Review Report
SSD 6766	G16	<p>Within 60 days of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary and relevant public authorities, together with its response to any recommendations contained in the audit report. The audit report and response to any recommendations shall be published on the Project website.</p>	operation	Compliant	Undertaken on 10 May 2021. Report to be provided within specific timeframe

## **APPENDIX B - SSD 7628 CONDITIONS OF CONSENT**

COMPLIANCE REQUIREMENT	UNIQUE (ID)	COMPLIANCE REQUIREMENT	DEVELOPMENT PHASE	COMPLIANCE STATUS	EVIDENCE AND COMMENTS
SSD 7628	A1	In addition to meeting the specific performance measures and criteria established under this consent all reasonable measures must be implemented to prevent, and if prevention is not reasonable, minimise, any harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	All	Ongoing	
SSD 7628	A2	The development may only be carried out: (a) in compliance with the conditions of this consent; (b) in accordance with all written directions of the Secretary in relation to this consent; (c) in accordance with the EIS, Submissions Report, Consolidated assessment clarification responses, and updated Biodiversity Assessment Report; (d) in accordance with the amended Development Layout Plans and Design Plans, amended WSUD plans and amended architectural plans to be submitted for the Secretary's approval as part of this consent; and (e) in accordance with the management and mitigation measures at APPENDIX B of this consent.	All	Ongoing	
SSD 7628	A3	The Secretary may make written directions to the Applicant: (a) as a result of the Department's assessment of any strategy, plan, program, review, audit, notification, report or correspondence submitted under or in relation to this consent; (b) as a result of the Department's assessment of any review, report or audit undertaken or commissioned by the Department regarding compliance with this consent or in relation to an incident (whether notified to the Department or not); and (c) in relation to the implementation of any actions or measures contained in any of the documents listed in condition A2.	All	N/A	No written directions to the Applicant have been made by the secretary
SSD 7628	A4	The conditions of this consent and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c) or A2(e). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c) and A2(e), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict. For the purpose of this condition, there will be an inconsistency between documents if it is not possible to comply with both documents, or in the case of a condition of consent or direction of the Secretary and a document, if it is not possible to comply with both the condition or direction and the document.	All	N/A	No inconsistencies have been triggered.
SSD 7628	A8	The container freight road volume must not exceed 250,000 TEUs p.a., subject to the exception identified in condition A9, which may only be considered under condition A9 after the facility has been in operation.	Operation	Not triggered	
SSD 7628	A9	The movement of container freight by road may exceed the 250,000 TEU limit p.a. by up to a further 250,000 TEU p.a., if the Secretary is satisfied that traffic monitoring and modelling of the operation of the facility demonstrate that traffic movements resulting from the proposed increase in TEU will achieve the objective of not exceeding the capacity of the transport network.	Operation	Not triggered	
SSD 7628	A10	In determining the TEU limit, the Secretary may take account any roadworks or mitigation measures proposed under a Voluntary Planning Agreement to minimise traffic impacts.	All	Ongoing	
SSD 7628	A11	The maximum GFAs for the following uses apply: (a) 300,000m <sup>2</sup> for the warehousing and distribution facilities; and (b) 8,000m <sup>2</sup> for the freight village.	Operation	Not triggered	
SSD 7628	A12	The warehousing and distribution facilities must only be used for activities associated with freight using the MPE Stage 1 rail intermodal terminal.	Operation	Not triggered	

SSD 7628	A13	Freight village tenants and occupations are restricted to those activities that provide: (a) ancillary support for the development, its tenants, worker population and visitors; (b) a nexus with activities undertaken in relation to the warehouse, logistics functions of the IMT development and/ or; (c) provide aligned services to the intermodal functions. Prior to occupancy of any freight village tenancy, and every subsequent occupation of these tenancies, details of the tenant and occupation activity is to be submitted to the Secretary demonstrating that the proposed activity complies with this condition.	Operation	Not triggered	
SSD 7628	A14	With the approval of the Secretary, the Applicant may submit any strategy, plan or program required by this consent on a staged basis.	All	Compliant	The CTP (Rev 5) dated 24 May 2018, was approved by DP&E on 8/06/2018 Document Delivery Strategy (DDS)
SSD 7628	A15	If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program.	All	Compliant	The CTP (Rev 5) dated 24 May 2018, was approved by DP&E on 8/06/2018 Document Delivery Strategy (DDS)
SSD 7628	A16	With the approval of the Secretary, any strategy, plan or program required by this consent may be combined	All	Ongoing	CERSEDMP and SWMP
SSD 7628	A17	In seeking the Secretary's approval, a clear relationship must be demonstrated between the strategies, plans or programs that are proposed to be combined.	All	Ongoing	All plans
SSD 7628	A19	where conditions of this consent require a document to be prepared in consultation with an identified party, the Applicant must: (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; (b) provide evidence that at least two weeks was provided for the relevant party to comment on the document; and (c) include in the document: (i) details of the consultation undertaken; (ii) a description of how matters raised by those consulted have been resolved to the satisfaction of both the Applicant and the party consulted; and (iii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has	All	Compliant	Stakeholder consultation outcomes addressed within each management plan.
SSD 7628	A20	All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits, approvals and consents.	All	Compliant	CEMP (Rev 4) dated 5 April 2018, approved by DP&E 8/06/2018 Specific licence/permit requirements are addressed in each subplan. Compliance Tracker.
SSD 7628	A30	Unless the Applicant and the applicable authority agree otherwise, the Applicant must: (a) repair, or pay the full costs associated with repairing any public infrastructure that is damaged by carrying out the development; and (b) relocate, or pay the full costs associated with relocating any infrastructure that needs to be relocated as a result of the development.	All	Not triggered	Records of damage or rectification required should activities cause damage to public infrastructure.
SSD 7628	A32	All plant and equipment used at the site or to monitor the performance of the development must be: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	All	Compliant	CEMP / Maintenance records
SSD 7628	B1	The Applicant must: (a) prepare each plan, program and other documents in consultation with the specified stakeholders; (b) not commence each phase of the project until the plans, programs and other documents required under this consent are approved by or, where not required to be approved, submitted to the Secretary specified within the timeframes; and (c) implement the most recent version of the required plans and programs approved by the Secretary for the duration of the development.	All	Compliant	Record of consultation included in all plans.

SSD 7628	B28	<p>The Applicant is to prepare a <b>Biannual Trip Origin and Destination Report</b> each six months following commencement of any operation (in a format agreed with TfNSW and RMS) that advises:</p> <p>(a) the number of actual and standard twenty foot equivalent shipping containers despatched and received during the period;</p> <p>(b) the number of days in the period that the truck gate was open for despatching trucks 24 hours a day, 7 days a week and detail any exceptions to this and advise actual hours of operation;</p> <p>(c) records of vehicle numbers accessing the site; and</p> <p>(d) representative vehicle origins and destinations, based on a cordon in the surrounding network.</p> <p>A framework for recording and reporting on the data required for the report, prepared to the satisfaction of TfNSW and RMS, is to be submitted to the Secretary three months prior to the commencement of operation.</p> <p>The report is to be submitted within one month of its preparation throughout operation of the project, starting six months from the commencement of operation, unless otherwise agreed by the Secretary, TfNSW and RMS.</p> <p>The cordon count at (d) above will:</p> <ul style="list-style-type: none"> <li>• apply to all classes of vehicles; and</li> <li>• cover the intermodal terminal, the warehousing facility and any other uses such as the freight village.</li> </ul>	Operation	Compliant	Second BTODR Reporting Completed. Currently being finalised to be submitted to the Secretary for information
SSD 7628	B30	The Applicant must ensure that the <b>Workplace Travel Plan</b> is implemented for the life of the development.	Operation	Ongoing	Approval of the WTP was received by DPIE on 6/12/2019
SSD 7628	B51	The annual independent audit must be undertaken by a suitably qualified WSUD professional. The audit is to verify the condition of the treatment system(s), verify and document that the system(s) is working as intended, verify the system(s) has been cleaned adequately, verify there is no excessive build-up of material in the system(s) and identify any issues with the treatment system(s) which require rectification for the system(s) to adequately perform its intended function.	Operation	Complaint	Independent WSUD Audit undertaken on 10 May 2021. Report to be provided to Secretary once finalised.
SSD 7628	B54	Best practice reactive and proactive management measures must be implemented to minimise dust generated during all works authorised by this consent.	All	Compliant	Monthly internal air quality reports prepared by Arcadis
SSD 7628	B55	Deposited dust must not exceed an increase of 2g/m <sup>2</sup> /month or maximum of 4g/m <sup>2</sup> /month at the closest off site sensitive receiver.	All	Compliant	Monthly internal air quality reports prepared by Arcadis
SSD 7628	B60	The Applicant must ensure the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).	All	Ongoing	CEMP/ OEMP
SSD 7628	B61	Equipment must be installed and operated in accordance with best practice to ensure that the development complies with all load limits, air quality criteria, air emission limits and air quality monitoring requirements as specified under this consent.	All	Ongoing	CEMP/ CAQMP
SSD 7628	B64	Continuous <b>noise monitoring</b> at sensitive receivers must be undertaken during early works, fill importation, construction and for at least 12 months following occupation of the entire site.	All	Complaint	continuous noise monitoring is ongoing
SSD 7628	B79	The permitted hours of warehouse and distribution operation are detailed in <b>Table 4</b> .	Operation	Compliant	OEMP
SSD 7628	B80	Noise generated by operation of the development inclusive of MPE Stage 1 operations must not exceed the noise limits in <b>Table 5</b> .	Operation	Ongoing	OEMP
SSD 7628	B85	The Applicant must carry out <b>noise monitoring of mechanical plant and other noisy equipment</b> for a minimum period of one week where valid data is collected following occupation of each warehouse. The monitoring program must be carried out by a suitably qualified and experienced person(s) and a Monitoring Report for Mechanical Plant must be submitted to the Secretary within two months of occupation or each tenancy to verify predicted mechanical plant and equipment noise levels.	Operation	Compliant	WH1,3,4&5 have been submitted to DPIE

SSD 7628	B86	Within 12 months of occupation of the first warehouse, 50% occupation of the site and 100% occupation of the site, or as otherwise agreed by the Secretary, the Applicant must undertake <b>operational noise monitoring</b> to compare actual noise performance of the project against predicted noise performance, and prepare an <b>Operational Noise Report</b> to document this monitoring. The Report must include, but not necessarily be limited to: a) noise monitoring to assess compliance with the predicted operational noise levels and the noise limits specified in Table 5; b) a review of the operational noise levels in terms of criteria and noise goals established in the NSW RNP (EPA, 2011); c) sleep disturbance impacts compared to those determined in documents specified under condition A2; d) impacts associated with annoying characteristics such as prominent tonal components, impulsiveness, intermittency, irregularity and dominant low-frequency content; e) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which project noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers; f) details of any complaints and enquiries received in relation to operational noise generated by the project between the date of commencement of operation and the date the report was prepared; g) any required recalibrations of the noise model taking into consideration factors such as actual traffic numbers and heavy vehicle proportions; and h) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of all feasible and reasonable mitigation measures.	Operation	Compliant	Industrial noise assessment report completed as part of 50% occupation of the site
SSD 7628	B87	The Applicant must provide the Secretary and the EPA with a copy of the Operational Noise Report within 60 days of completing the operational noise monitoring referred to in (a) above or as otherwise agreed by the Secretary.	Operation	Compliant	To be submitted. Currently being finalised
SSD 7628	B88	To ensure the operational noise impacts are appropriately managed, the following measures apply: a) use of best practice plant; and b) preparation of a risk assessment to determine if non-tonal reversing alarms can be fitted as a condition of site entry. Alternatively, site design may include traffic flow that does not require or precludes reversing of vehicles <sup>9</sup>	Operation	Not triggered	Not required unless identified by B85
SSD 7628	B89	For the duration of operation heavy road freight vehicles are not permitted to use Moorebank Avenue south of the East Hills Railway corridor. A main gate monitoring system (e.g. CCTV) must be installed to identify heavy vehicles turning left from the terminal site onto Moorebank Avenue, or turning right from Moorebank Avenue to the terminal site. The Secretary may at any time request the Applicant to provide a <b>heavy vehicle monitoring report</b> for the prior 12 month period.	Operation	Compliant	No heavy road freight vehicle from the project have been identified using the East Hills Railway corridor
SSD 7628	B90	For the duration of operation, the Applicant must: a) continue to implement all reasonable and feasible best practice noise mitigation measures; b) continue to investigate ways to reduce the noise generated by the development, including maximum noise levels which may result in sleep disturbance; and c) report on these investigations and the implementation and effectiveness of these measures in the Annual Review to the satisfaction of the Secretary.	Operation	Compliant	Ongoing monitoring. To be reported in the Annual Review. Annual review to be submitted to Secretary
SSD 7628	B121	Waste must be secured and maintained within designated waste storage areas at all times and must not leave the site or be deposited on or otherwise enter neighbouring public or private properties.	Operation	Compliant	No community waste complaints identified. Warehouse tenant have procured Waste Contractor to dispose any waste
SSD 7628	B122	All waste materials removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the materials.	All	Compliant	
SSD 7628	B123	The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the latest version of EPA's <i>Waste Classification Guidelines Part 1: Classifying Waste</i> (EPA, 2014).	All	Compliant	
SSD 7628	B124	Waste generated outside the site must not be received at the site for storage, treatment, processing, reprocessing, or disposal unless it satisfies these conditions.	All	Compliant	
SSD 7628	B125	The Applicant must retain all sampling and waste classification data for the life of the development in accordance with the requirements of EPA.	All	Compliant	
SSD 7628	B126	The collection of waste generated during operation of the development must be undertaken between 7 am to 10 pm Monday to Friday	Operation	Compliant	Review of Warehouse Waste Registers
SSD 7628	B145	Public road access must comply with section 4.1.3(1) of <i>Planning for Bush Fire Protection 2006</i> except for the requirement for through-access.	All	Compliant	CTP/ BFMP
SSD 7628	B146	The provision of water, electricity and gas must comply with section 4.1.3 of <i>Planning for Bush Fire Protection 2006</i> .	All	Compliant	CTP/ BFMP
SSD 7628	B153	The Applicant must obtain a certificate from a suitable qualified tradesperson, certifying that kitchen, food storage and food preparation areas have been fitted in accordance with Australian Standard AS4674. The Applicant must provide evidence of receipt of the certificate to the satisfaction of the Certifying Authority prior to occupation.	Operation	Not triggered	No Warehouses contain any food storage or food preparation areas
SSD 7628	C5	Overall responsibility of the development, including the freight village environmental management during operation, must be by the entity responsible for the Precinct environmental management.	Operation	Not triggered	OEMP

SSD 7628	C7	<p>The Applicant must ensure that the environmental management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <p>(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);</p> <p>(ii) any relevant limits or performance measures/criteria; and</p> <p>(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</p> <p>(c) a description of the management measures to be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <p>(i) impacts and environmental performance of the development; and</p> <p>(ii) effectiveness of any management measures (see (c) above);</p> <p>(e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(g) a protocol for managing and reporting any:</p> <p>(i) incidents and non-compliances;</p> <p>(ii) complaints;</p> <p>(iii) non-compliances with statutory requirements; and</p> <p>(h) a protocol for periodic review of the plan.</p> <p>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for a particular management plan.</p>	All	Ongoing	All management plans
SSD 7628	C9	<p>Within three months of:</p> <p>(a) the submission of an annual review under condition C10;</p> <p>(b) the submission of an incident or non-compliance notification under condition C13;</p> <p>(c) the submission of an audit under condition C18;</p> <p>(d) the approval of any modification of the conditions of this consent; or</p> <p>(e) the issue of a direction of the Secretary under condition A2;</p> <p>the strategies, plans and programs required under this consent must be reviewed, and if necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, must be revised, to the satisfaction of the Secretary. Where revisions are required, the revised document must be submitted to the Secretary for approval within six weeks of the review.</p> <p>Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve the environmental performance of the development.</p>	All	Ongoing	CEMP
SSD 7628	C10	<p>Each year, the Applicant must submit a <b>review the environmental performance</b> of the development (including all tenants and occupants) to the to the Department. The review must:</p> <p>(a) describe the development that was carried out in the previous calendar year, and the development that is proposed to be carried out over the next year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records from the previous year, including a comparison of these against the:</p> <p>(i) the relevant statutory requirements, limits or performance measures/criteria;</p> <p>(ii) requirements of any plan or program required under this consent;</p> <p>(iii) the monitoring results of previous years; and</p> <p>(iv) the relevant predictions in the EIS, Submissions Report, Consolidated assessment clarification responses; Modification Assessment, or conditions of this consent;</p> <p>(c) identify any non-compliance over the previous year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the development;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the next year to improve the environmental performance of the development.</p> <p>The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the CCC and any interested person upon request.</p>	All	Complaint	Covered in Aspect's Annual Review Report
SSD 7628	C11	<p>The Department must be notified in writing to <a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a> immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident.</p>	All	Ongoing	CEMP/OEMP

SSD 7628	C12	A written incident notification addressing all requirements for such notification set out in Appendix D of this consent, must also be emailed to the Department at the following address: <a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a> within 7 days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition or, having given such notification, subsequently forms the view that an incident has not occurred.	All	Ongoing	CEMP/OEMP
SSD 7628	C13	Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Secretary the Applicant must provide the Secretary and any relevant public authorities (as determined by the Secretary) with a detailed report on the incident addressing all requirements for such reporting set out in Appendix D of this consent, and such further reports as may be requested.	All	Ongoing	CEMP/OEMP
SSD 7628	C14	Any written requirements of the Secretary or relevant public authority (as determined by the Secretary) which may be given at any point in time, to address the cause or impact of an incident must be complied with and within any timeframe specified by the Secretary or relevant public authority.	All	Ongoing	CEMP/OEMP
SSD 7628	C15	If statutory notification is provided to EPA as required under the POEO Act in relation to the development, such notification must also be provided to the Secretary within 24 hours after the notification was provided to EPA.	All	Ongoing	CEMP/OEMP
SSD 7628	C16	The Department must be notified in writing to <a href="mailto:compliance@planning.nsw.gov.au">compliance@planning.nsw.gov.au</a> within 7 days after the Applicant becomes aware of any non-compliance.	All	Ongoing	CEMP/OEMP
SSD 7628	C17	The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply, the reasons for the non-compliance (if known), and what actions have been, or will be, undertaken to address the non-compliance.	All	Ongoing	CEMP/OEMP
SSD 7628	C18	Within one year of the commencement of any development under this consent, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an <b>Independent Environmental Audit (Audit)</b> of the development. Audits must: (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) be carried out in consultation with the relevant agencies and the CCC; (c) assess the environmental performance of the development (and tenancies) and assess whether it is complying with the relevant requirements in this consent, and any strategy, plan or program required under this consent; and (d) review the adequacy of any approved strategy, plan or program required under this consent; and (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under this consent.	All	Compliant	Undertaken on 10/5/21. Report to be submitted within specific timeframe
SSD 7628	C19	Within three months of commencing an Independent Environmental Audit, or unless otherwise agreed by the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary.	All	Compliant	Undertaken on 10/5/21. Report to be submitted within specific timeframe

SSD 7628	C20	<p>At least 48 hours before the commencement of construction until the completion of all works under this consent, including demolition and remediation, the Applicant must:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> <li>(i) the documents referred to in condition A2 of this consent;</li> <li>(ii) all current statutory approvals for the development;</li> <li>(iii) all approved strategies, plans and programs required under the conditions of this consent;</li> <li>(iv) regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent;</li> <li>(v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</li> <li>(vi) a summary of the current stage and progress of the development;</li> <li>(vii) contact details to enquire about the development or make a complaint;</li> <li>(viii) a complaints register updated on a monthly basis;</li> <li>(ix) the Annual Reviews of the development;</li> <li>(x) audit reports prepared as part of any independent environmental audit of the development and the Applicant's response to the recommendations in any audit report;</li> <li>(xi) any other matter required by the Secretary; and</li> </ul> <p>(b) keep such information up to date, to the satisfaction of the Secretary.</p>	All	Compliant	The website is being progressively updated as documents are approved for each stage of the construction activities.
SSD 7628	C21	<p>The Proponent must prepare and implement a <b>Compliance Tracking Program</b> to track compliance with the requirements of this approval. The <b>Compliance Tracking Program</b> must be submitted to the Secretary for approval prior to the commencement of construction.</p> <p>The Compliance Tracking Program must include, but not be limited to:</p> <ul style="list-style-type: none"> <li>(a) provision for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the development (including prior to each stage, where works are being staged);</li> <li>(b) provision for periodic review of the compliance status of the development against the requirements of this approval and the environmental management measures committed to in the documents referred to in condition A2;</li> <li>(c) provision for periodic reporting of compliance status to the Secretary, including but not limited to: <ul style="list-style-type: none"> <li>(i) a <b>Pre-Construction Compliance Report</b> prior to the commencement of construction,</li> <li>(ii) quarterly Construction Compliance Reports, for the duration of construction, and</li> <li>(iii) a <b>Pre-Operation Compliance Report</b> prior to the commencement of operation, and six monthly operational compliance reports;</li> </ul> </li> <li>(d) a program for independent environmental auditing;</li> <li>(e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;</li> <li>(f) provision for reporting environmental incidents to the Secretary during construction;</li> <li>(g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and (h) provision for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.</li> </ul>	All	Compliant	This Report



## **APPENDIX C – COMPLETED COMPLIANCE REPORTS**



02 9604 0288 - 24 Hour Service  
Email: [service@midplumbing.com.au](mailto:service@midplumbing.com.au)  
Web: [www.midplumbing.com.au](http://www.midplumbing.com.au)  
1 Jasmine Place Greystanes 2145  
A.B.N 67 093 687 177 Lic 119664C

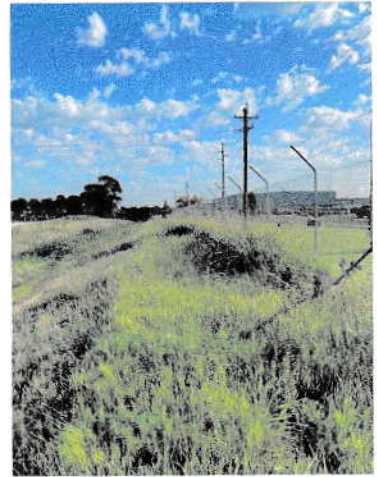
Maintenance Log Book OPS - P12 (Environmental Activities – Apical Bushfire Planning P/L) – 4<sup>th</sup> February 2021



SW – 1 INVASIVE WEED LUDWIGIA PERUVIANA – WAS  
SPRAYED WITH HERBICIDE CONTROL TO REDUCE POTENTIAL  
FOR SPREADING



SW- 1 SPOT SPRAYING TARGETED WEED CONTROL, GRASSY  
SWALE BANKS AND FENCE LINE REQUIRE BRUSHCUTTING ON  
NEXT VISIT





SW - 1 DISCHARGE OUTLETS AND CULVERTS NEED REPAIR  
 EROSION OCCURRING AROUND ROCK CHUTE AND PIPE DUE TO NO HEAD WALL OR CULVERT.



OSD-09 - WEEDING OF THE DETENTION BASIN, HAND REMOVAL AND SPOT HERBICIDE SPRAYING. INFILL PLANTING IS REQUIRED TO REPLACE FAILURE AREAS TO ENSURE CORRECT FUNCTION OF THE SYSTEM. INSTALL (100) UNITS OF REEDS AND SEDGES TO FILL IN GAP AREAS.



SWALE - INSPECTED AND RUBBISH REMOVAL



Focus/Item SIOMP Reference		Service Frequency	
SW-01	Raingarden (Bio-retention)	6 monthly After Major Storm	February 4 <sup>th</sup> 2021
ID	Mgmt Measure	Maintenance Action	Outcome/Results
SW-01	Check for any evidence of channelization of erosion	Reinstate eroded areas so that original designed profile is maintained	'Apical Bushfire Planning – Enviro' Attendance to site Spot Spray drainage culvert and embankments for invasive weeds, collect and remove litter and debris. Additional – Treat Invasive Weed Ludwigia Peruviana (Water Primrose) to limit spread within the system.
Precise Work Zone, Site Ref.		Entire length of SW-01	
Scheduled Service Date			
Date Works Completed		February 4 <sup>th</sup> 2021	
Date Client Notified of Works Status			
Date Photos emailed to client. Defects Identified/Provide supporting documentation and photographic evidence		Photo's provided by 'Apical Planning' – For Planning: 'Site will require brushcutting along top of swale banks and fence line boundary upon next visit'.	
Quote for Additional Works Y/N		Brush cutting and maintenance of swale banks and fence lines upon next visit. Control of invasive species African Love Grass ( <i>Eragrostis curvula</i> ) is also recommended.  Also Detention Basin – requires infill supply and installation of 100 units, reeds and sedges to fill gap areas where plants have failed.	
Quote Ref No.			
<b>Comments:</b>  Weed control – spot spraying using herbicides – glyphosate 360g/l at a 1% rate with Metsulfuron-methyl 1g / 10 litres pulse penetrant and Red Herbi-dye Complete SW-01 center channel and both banks. Applied 50 litres (5 back packs) of mixed volume from back-pack sprayers. Remove 4 X chaff bags of litter.  2 discharge culverts require repairs to rock chutes and installation of rock or culvert headwalls due to observed erosion starting to occur around the discharge points which will eventually lead to channel and erosion and bank failures around the discharge outlets (image provided)			

Focus/Item SIOMP Reference		Service Frequency	
OSD-09	Raingarden (Bio-retention)	6 monthly After Major Storm	February 4 <sup>th</sup> 2021
ID	Mgmt Measure	Maintenance Action	Outcome/Results
OSD-09	Check for any evidence of channelization of erosion	Reinstate eroded areas so that original designed profile is maintained	'Apical Bushfire Planning – Enviro' Attendance to site Collect and remove litter and debris.
Precise Work Zone, Site Ref.		Entire length of OSD-09	
Scheduled Service Date			
Date Works Completed		February 4 <sup>th</sup> 2021	
Date Client Notified of Works Status			
Date Photos emailed to client. Defects Identified/Provide supporting documentation and photographic evidence		Photo's provided by 'Apical Planning'	
Quote for Additional Works Y/N			
Quote Ref No.			
<b>Comments:</b> Collect and remove 1/2 chaff bag of litter and debris. No observed weeds, area stable.			

Focus/Item SIOMP Reference		Service Frequency	
SW-04	Raingarden (Bio-retention)	6 monthly After Major Storm	February 4 <sup>th</sup> 2021
ID	Mgmt Measure	Maintenance Action	Outcome/Results
SW-04	Check for any evidence of channelization of erosion	Reinstate eroded areas so that original designed profile is maintained	'Apical Bushfire Planning – Enviro' Attendance to site Spot Spray drainage culvert and embankments for invasive weeds, collect and remove litter and debris.
Precise Work Zone, Site Ref.		Entire length of SW-04	
Scheduled Service Date			
Date Works Completed		4/2/21	
Date Client Notified of Works Status			
Date Photos emailed to client. Defects Identified/Provide supporting documentation and photographic evidence		Photo's provided by 'Apical Planning'. Site will require brushcutting and slashing of tall grass vegetation for visual amenity and maintenance of weed growth.	
Quote for Additional Works Y/N			
Quote Ref No.			
<b>Comments:</b>			
Weed control – spot spraying using herbicides – glyphosate 360g/l at a 1% rate with Metsulfuron-methyl 1g / 10 litres pulse penetrant and Red Herbi-dye Complete SW-01 center channel and both banks. Applied 30 litres (3 back packs) of mixed volume from back-pack sprayers. Remove 2 X chaff bags of litter, plastics and cardboard boxes.			

**Target Species**

African love Grass- *Eragrostis curvula*  
Fleabane- *Conzya bonariensis*  
Forest Nightshade- *Solanum sisymbriifolium*  
Fire weed- *Senecio madagascariensis*  
Mustard weed- *Sisymbrium officinale*  
Paddy's lucern- *Sida rhombifolia*  
Peruvian water primrose- *Ludwigia peruviana*  
Mixed annuals/ Grasses

**Herbicide Used - Product**

Glyphosate 360g/l

**Additive Used**

Synertril Oil

**Equipment Used**

Backpack sprayer 15L

**Litres / Grams Used Chemical**

1L

**Litres Used As Mixed (Chems)**

70

**Weather**

Warm (20-26 degrees C)

**Wind Speed**

Light (5-10kms)

**Wind Direction**

North East

**Humidity %**

80

**Rain Predicted Hours**

Nil

**Application Start Time**

07:00 AM

**Application End Time**

03:30 PM

# MOOREBANK LOGISTIC PARK - PRECINCT EAST

## Operational Noise Monitoring for Moorebank Logistic Park - Q1 2021

8 June 2021

Qube Property Management Services Pty Ltd c/- Tactical Group

TL116-05F12 Moorebank INP Monitoring Q1 2021 (r2)

## Document details

Detail	Reference
Doc reference:	TL116-05F12 Moorebank INP Monitoring Q1 2021 (r2)
Prepared for:	Qube Property Management Services Pty Ltd c/- Tactical Group
Address:	Level 15, 124 Walker Street North Sydney NSW 2060
Attention:	Cathal McGann

## Document control

Date	Revision history	Non-issued revision	Issued revision	Prepared	Instructed	Reviewed / Authorised
22.04.2021	Final	0	1	J. Liang	C. Weber	C. Weber
08.06.2021	Minor update to reflect 50% occupation status of site	-	2	C. Weber	-	C. Weber

### Important Disclaimers:

The work presented in this document was carried out in accordance with the Renzo Tonin & Associates Quality Assurance System, which is based on Australian/New Zealand Standard AS/NZS ISO 9001.

This document is issued subject to review and authorisation by the suitably qualified and experienced person named in the last column above. If no name appears, this document shall be considered as preliminary or draft only and no reliance shall be placed upon it other than for information to be verified later.

This document is prepared for the particular requirements of our Client referred to above in the 'Document details' which are based on a specific brief with limitations as agreed to with the Client. It is not intended for and should not be relied upon by a third party and no responsibility is undertaken to any third party without prior consent provided by Renzo Tonin & Associates. The information herein should not be reproduced, presented or reviewed except in full. Prior to passing on to a third party, the Client is to fully inform the third party of the specific brief and limitations associated with the commission.

In preparing this report, we have relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by the Client and/or from other sources. Except as otherwise stated in the report, we have not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

We have derived data in this report from information sourced from the Client (if any) and/or available in the public domain at the time or times outlined in this report. The passage of time, manifestation of latent conditions or impacts of future events may require further examination and re-evaluation of the data, findings, observations and conclusions expressed in this report.

We have prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

The information contained herein is for the purpose of acoustics only. No claims are made and no liability is accepted in respect of design and construction issues falling outside of the specialist field of acoustics engineering including and not limited to structural integrity, fire rating, architectural buildability and fit-for-purpose, waterproofing and the like. Supplementary professional advice should be sought in respect of these issues.

External cladding disclaimer: No claims are made and no liability is accepted in respect of any external wall and/or roof systems (eg facade / cladding materials, insulation etc) that are: (a) not compliant with or do not conform to any relevant non-acoustic legislation, regulation, standard, instructions or Building Codes; or (b) installed, applied, specified or utilised in such a manner that is not compliant with or does not conform to any relevant non-acoustic legislation, regulation, standard, instructions or Building Codes.

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# 1 Introduction

## 1.1 Project overview

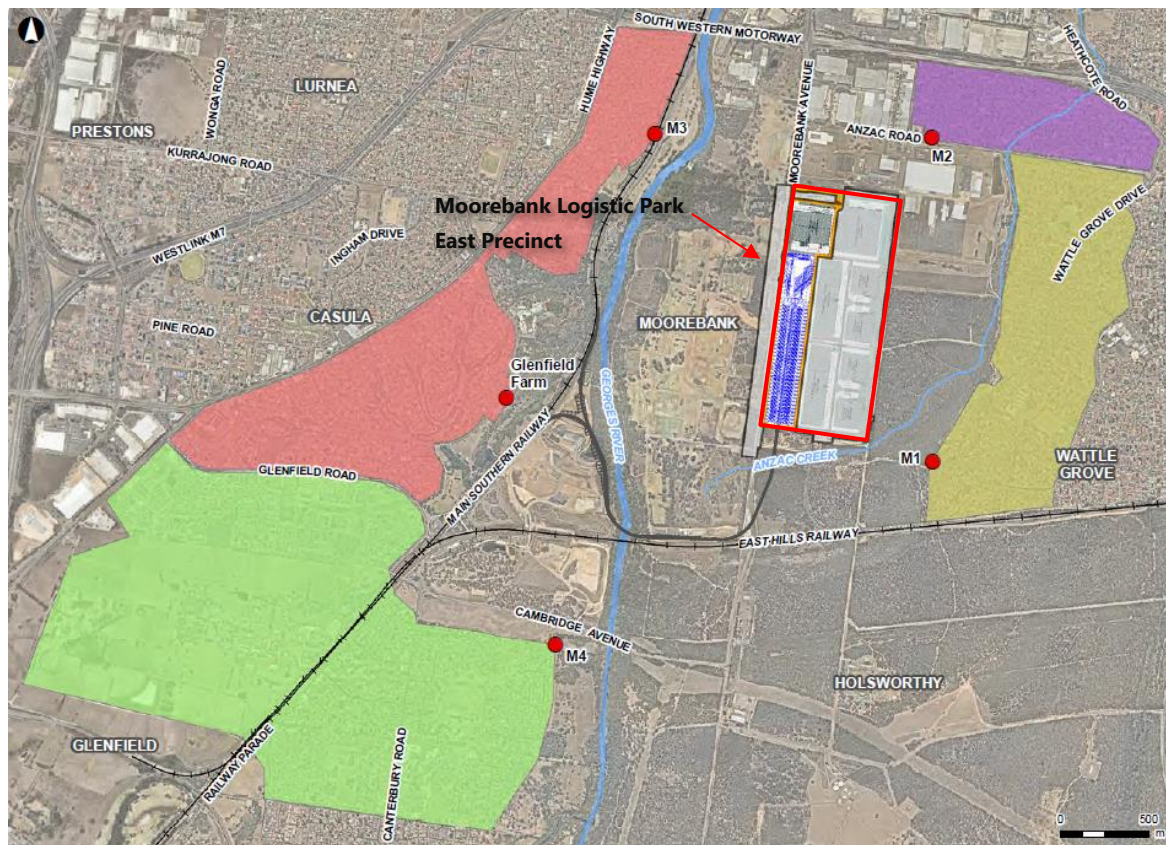
The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stages 1 and 2 of the Moorebank Precinct East (MPE) Project (SSD 6766 and SSD 7628 respectively), which together comprise the two stages of development under the MPE Concept Approval (MP10\_0193).

This operational noise monitoring has been conducted to assess noise impacts during operation of the east precinct for the first quarter in 2021. This report forms part of the evidence in addressing the following Approval Conditions:

- SSD 7628
  - Condition B80 – Monitoring of industrial noise to assess compliance with the noise criteria.
  - Condition B86 – Monitoring of industrial noise to assess compliance with the noise criteria at a point in time when the site is 50% occupied.
  - Condition B90 - Monitoring of industrial noise to identify if any additional reasonable and feasible best practice noise mitigation measures are required to minimise noise impacts, including maximum noise levels that may result in sleep disturbance.
  - Condition FCMM2E - Regular monitoring performed as part of the Operational Noise and Vibration Management Plan to assess noise levels generated by the project.
- SSD 6766
  - Condition F4 f(i) – Regular monitoring performed as part of the Operational Noise and Vibration Management Plan to assess noise levels generated by the project.
  - Condition F5B and F5C – Monitoring of industrial noise to assess compliance with the noise criteria.
  - Condition G15 – Noise monitoring to compare the actual noise performance of the project against the predicted noise levels and Approval Conditions.

The location of the Moorebank Logistics Park (MLP) East Precinct in relation to the nearest representative receivers (M1 to M4 and Glenfield Farm) is illustrated in Figure 1.

Figure 1 MLP East Precinct and nearest sensitive receivers



## 1.2 Scope of assessment

Renzo Tonin & Associates (NSW) Pty Ltd has been engaged by Tactical to perform attended noise measurements for the purpose of assessing compliance with the approval conditions. These measurements have been performed, consistent with the requirements of the NSW *Industrial Noise Policy* (EPA, 2000) and the Operational Noise and Vibration Management Plan<sup>1</sup>.

Airborne noise measurements were performed at the four potentially most affected residential receivers in the vicinity of the MLP. The representative receivers are located in the suburbs of Casula, Glenfield, Wattle Grove and Wattle Grove North (see Figure 1).

Daytime construction noise is currently occurring at the MLP site. Construction noise has been excluded from the assessment.

A description of technical terms used within this report is provided in Appendix A.

<sup>1</sup> OPERATIONAL NOISE AND VIBRATION MANAGEMENT PLAN - Moorebank Logistics Park – East Precinct (Revision 010 dated 24/9/2019)

## 2 Summary of noise objectives

Stages 1 and 2 of the MPE Project was approved under State Significant Development (SSD) Approvals 6766 and 7628, respectively.

The noise assessments for Stage 1 and 2 were prepared and assessed in accordance with the requirements of the NSW *Industrial Noise Policy* (EPA, 2000). However, the Determination Report for MPE Stage 2<sup>2</sup> identified that the recommended noise limits at Wattle Grove be amended to reflect the values derived in accordance with the *Noise Policy for Industry* (EPA, 2017).

A summary of the MPE Stage 1 and 2 noise limits from SSD 7628 is provided in Table 1. These levels are more stringent than the operational noise limits in SSD 6766.

**Table 1 MPE Stage 1 and 2 noise limits, dB(A)**

Sensitive receiver	Day <sup>1</sup>	Evening <sup>1</sup>	Night <sup>1</sup>	Night <sup>1</sup>
	L <sub>Aeq, 15 minute</sub>	L <sub>Aeq, 15 minute</sub>	L <sub>Aeq, 15 minute</sub>	L <sub>A1, 1 minute</sub>
Casula	35	35	35	52
Glenfield	35	35	35	52
Wattle Grove	35	35	35	52
Casula	35	35	35	52
Wattle Grove North <sup>2</sup>	35	35	35	52

Notes:

To determine compliance with the L<sub>Aeq, 15 minute</sub> noise limits, noise from the development is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy must also be applied to the measured noise levels where applicable.

To determine compliance with the L<sub>A1, 1 minute</sub> noise limits, noise from the project is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the project is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).

The noise emission limits identified above apply under meteorological conditions of:

- (i) wind speeds of up to 3 m/s at 10 metres above ground level; or
- (ii) 'F' atmospheric stability class.

Note 1: In accordance with the INP, day is the period from 7:00 am to 6:00 pm Monday to Saturday; or 8:00 am to 6:00 pm on Sundays and public holidays; evening is the period from 6:00 pm to 10:00 pm; and night is the remaining periods.

Note 2: Wattle Grove North receiver is not included in SSD 7628, but is listed as a sensitive receiver in the Operational Noise and Vibration Management Plan (Section 3.3).

<sup>2</sup> NSW Planning Assessment Commission Determination Report – Moorebank Intermodal Terminal, Stage 2, Moorebank Precinct East (SSD 7628).

### 3 Measurement methodology and equipment

All noise measurements were performed with a Type 1 sound level meter and Type 1 microphone calibrator. The measurement equipment calibration certificates were current at the time of the measurements. Before and after each series of measurements, the calibration of the sound level meter was verified using a reference calibration of 94 dB at 1 kHz. The difference between pre- and post-calibration levels was within 0.5 dB for all measurements.

Airborne noise measurements were performed in accordance with the requirements of the *NSW Industrial Noise Policy (EPA 2000)*.

A summary of measurement equipment is provided in Table 2.

**Table 2 Measurement equipment**

Description	Make	Model	Serial No	Last Date Calibrated
Type 1 sound level meter	NTi	XL2	A2A-05320-D2	24/11/2020
Type 1 sound level meter	NTi	XL2	A2A-09356-E0	1/5/2019
Sound level meter calibrator	Bruel & Kjaer	4231	2677710	3/12/2020

## 4 Measurement results

### 4.1 Measurement locations and time periods

18-hours of on-site attended measurements were performed between 25 March and 30 March 2021. The measurements were performed during representative daytime (7am to 6pm), evening (6pm to 10pm) and night-time (10pm to 7am) periods, consistent with the approved 24-hour operations.

Prior to the measurements, it was confirmed that the MLP site was operational to ensure that the measurements were representative of current options. It is understood that the facility is not currently operating at full capacity.

A summary of the attended measurement locations and the approximate distances to the MLP East Precinct is provided in Table 3. Additional details are provided in Appendix B.

A summary of the attended measurement periods is provided in Table 4.

**Table 3 Sensitive receivers and approximate distance from MLP East Precinct**

Measurement locations	Approximate distance (m) from MLP East Precinct
M1 - Wattle Grove	770
M2 - Wattle Grove North	1,050
M3 - Casula	960
M4 - Glenfield	1,250

**Table 4 Attended measurement periods**

Location	Measurement period 1	Measurement period 2
<b>Measurements during 7am to 6pm daytime period – 25 March 2021</b>		
M1 - Wattle Grove	9:45am to 10:50am (Note 1)	12:48pm to 1:35pm (Note 1)
M2 - Wattle Grove North	9:58am to 10:46am (Note 2)	1:12pm to 1:58pm (Note 2)
M3 - Casula	11:26am to 12:15pm (Note 3)	-
M4 - Glenfield	11:12am to 12:18pm (Note 4)	-
<b>Measurements during 6pm to 10pm evening period – 29 and 30 March 2021</b>		
M1 - Wattle Grove	30 March 6:49pm to 7:19pm (Note 1)	30 March 9:37pm to 9:52pm (Note 1)
M2 - Wattle Grove North	29 March 9:20pm to 9:50pm (Note 2)	30 March 7:27pm to 7:57pm (Note 2)
M3 - Casula	29 March 7:49pm to 8:19pm (Note 3)	30 March 8:10pm to 8:40pm (Note 3)
M4 - Glenfield	29 March 8:36pm to 9:06pm (Note 4)	30 March 8:53pm to 9:23pm (Note 4)
<b>Measurements during 10pm to 7am night-time period – 29 and 30 March 2021</b>		
M1 - Wattle Grove	29 March 10:00pm to 10:30pm (Note 1)	30 March 12:52am to 1:07am (Note 1)
M2 - Wattle Grove North	29 March 10:38pm to 11:08pm (Note 2)	30 March 1:32am to 2:02am (Note 2)
M3 - Casula	29 March 11:18pm to 11:48pm (Note 3)	30 March 10:43pm to 11:13pm (Note 3)
M4 - Glenfield	30 March 12:06am to 12:36am (Note 4)	30 March 11:27pm to 11:57pm (Note 4)

Location	Measurement period 1	Measurement period 2
Note 1: Measurements performed at 25 Yallum Ct		
Note 2: Measurements performed at 39 Anzac Rd		
Note 3: Measurements performed at St Andrews Park		
Note 4: Measurements performed at 26 Goodenough St		

## 4.2 Measurement results

Results from the attended noise measurements at all measurement locations is provided in Table 5. All noise measurements were performed over 15-minute measurement durations in accordance with the requirements of the approval conditions and the INP.

Table 5 Attended noise measurement results

ID	Address	Assessment period	L <sub>Aeq, 15minute</sub> noise limit, dB(A)	L <sub>A1, 1 minute</sub> noise limit, dB(A)	Measurement period	Measured noise levels, dB(A)		Estimated MLP noise contribution, dB(A)		Comments and measured L <sub>AFmax</sub> noise levels from typical events	MLP Noise Levels Comply?
						L <sub>Aeq, 15minute</sub>	L <sub>AF, 90%</sub>	L <sub>Aeq, 15minute</sub>	L <sub>AFmax</sub>		
<b>M1 - Wattle Grove</b>											
1	25 Yallum Ct.	Day	35	-	25/03/21 09:45 10:00	49	39	Note 1	Note 1	Background noise dominated by Moorebank Ave traffic: Moorebank traffic 48-50dBA, Lawn mower 56-57 dBA, Birds 70-71 dBA, Rail Traffic 49-50 dBA, Construction 50-53 dBA, Air traffic 58-60 dBA	Yes
2	25 Yallum Ct.	Day	35	-	25/03/21 10:05 10:20	49	39	Note 1	Note 1	Background noise dominated by Moorebank Ave traffic: Moorebank traffic 48-50dBA, Rail Traffic 49-51 dBA, Construction 52-54 dBA, Air Traffic 58-60 dBA	Yes
3	25 Yallum Ct.	Day	35	-	25/03/21 10:20 10:35	47	40	Note 1	Note 1	Background noise dominated by Moorebank Ave traffic: Moorebank traffic 48-50dBA, Rail Traffic 49-51 dBA, Air traffic 58-60 dBA	Yes
4	25 Yallum Ct.	Day	35	-	25/03/21 10:35 10:50	52	38	Note 1	Note 1	Background noise dominated by Moorebank Ave traffic: Moorebank traffic 49-53dBA, Rail Traffic 50-52 dBA, Air traffic 58-62 dBA, Bird 62-65 dBA	Yes
5	25 Yallum Ct.	Day	35	-	25/03/21 12:48 13:03	48	40	Note 1	Note 1	Background noise dominated by Moorebank Ave traffic: Moorebank traffic 46-49dBA, Rail Traffic 50-52 dBA, Air traffic 59-60 dBA, Bird 65-67 dBA	Yes
6	25 Yallum Ct.	Day	35	-	25/03/21 13:05 13:20	44	38	Note 1	Note 1	Background noise dominated by noise from MLP East precinct construction activities: Construction 41-45dBA, Rail traffic 47-49 dBA	Yes
7	25 Yallum Ct.	Day	35	-	25/03/21 13:20 13:35	44	38	Note 1	Note 1	Background noise dominated by noise from MLP East precinct construction activities: Construction 44-47dBA, Rail traffic 46-48 dBA	Yes
8	25 Yallum Ct.	Evening	35	-	30/03/21 18:49 19:04	44	35	Note 1	Note 1	Background noise dominated by Moorebank Ave Traffic: Moorebank Traffic 41-45dBA, Rail Traffic 49-51 dBA, Bird 65-67 dBA, Air Traffic 60-62 dBA	Yes
9	25 Yallum Ct.	Evening	35	-	30/03/21 19:04 19:19	46	37	Note 1	Note 1	Background noise dominated by Moorebank Ave Traffic: Moorebank Traffic 46-47dBA, Rail Traffic 48-50 dBA	Yes
10	25 Yallum Ct.	Evening	35	-	30/03/21 21:37 21:52	46	43	Note 1	Note 1	Background noise dominated by noise from Air Traffic: Rail Traffic 49-51 dBA, Air Traffic 60-63 dBA	Yes
11	25 Yallum Ct.	Night	35	52	29/03/21 21:59 22:14	47	41	Note 1	Note 1	Background noise dominated by noise from Air Traffic: Rail Traffic 50-52 dBA, Bird 51-52 dBA, Air Traffic 60-66 dBA	Yes
12	25 Yallum Ct.	Night	35	52	29/03/21 22:14 22:29	50	41	Note 1	Note 1	Background noise dominated by noise from Rail Traffic: Moorebank Traffic 41-43dBA, Rail Traffic 50-52 dBA, Air Traffic 60-65 dBA	Yes
13	25 Yallum Ct.	Night	35	52	30/03/21 00:52 01:07	41	39	Note 1	Note 1	Background noise dominated by noise from Nature: Rail Traffic 50-51 dBA, Birds 50-51 dBA	Yes
14	25 Yallum Ct.	Night	35	52	30/03/21 01:07 01:22	40	39	Note 1	Note 1	Background noise dominated by noise from Nature: Birds 50-56 dBA, Rail Traffic 49-50 dBA	Yes
<b>M2 - Wattle Grove North</b>											
15	39 Anzac Rd	Day	35	-	25/03/21 09:58 10:13	67	51	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 85-94 dBA, Moorebank Ave Traffic 50-53 dBA	Yes
16	39 Anzac Rd	Day	35	-	25/03/21 10:14 10:29	68	54	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 70-75 dBA, Moorebank Ave Traffic 52-55 dBA	Yes
17	39 Anzac Rd	Day	35	-	25/03/21 10:31 10:46	68	53	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 86-87 dBA, Moorebank Ave Traffic 52-55 dBA	Yes
18	39 Anzac Rd	Day	35	-	25/03/21 13:12 13:27	68	53	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 88-89 dBA, Moorebank Ave Traffic 50-51 dBA	Yes
19	39 Anzac Rd	Day	35	-	25/03/21 13:27 13:42	67	52	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 87-88 dBA, Moorebank Ave Traffic 47-50 dBA	Yes
20	39 Anzac Rd	Day	35	-	25/03/21 13:43 13:58	68	50	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 88-89 dBA, Moorebank Ave Traffic 48-50 dBA	Yes
21	39 Anzac Rd	Evening	35	-	30/03/21 19:27 19:42	68	51	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 88-89 dBA, Moorebank Ave Traffic 46-47 dBA, Air Traffic 50-55 dBA	Yes
22	39 Anzac Rd	Evening	35	-	30/03/21 19:42 19:57	68	52	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 88-89 dBA, Moorebank Ave Traffic 46-47 dBA, Air Traffic 50-55 dBA	Yes
23	39 Anzac Rd	Evening	35	-	29/03/21 21:20 21:35	59	48	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 80-83 dBA, Moorebank Ave Traffic 50-51 dBA	Yes
24	39 Anzac Rd	Evening	35	-	29/03/21 21:35 21:50	66	45	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 81-82 dBA, Moorebank Ave Traffic 50-52 dBA	Yes
25	39 Anzac Rd	Night	35	52	29/03/21 22:38 22:53	62	38	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 80-81 dBA, Moorebank Ave Traffic 47-48 dBA	Yes
26	39 Anzac Rd	Night	35	52	29/03/21 22:53 23:08	64	37	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 81-82 dBA, Moorebank Ave Traffic 47-50 dBA	Yes
27	39 Anzac Rd	Night	35	52	30/03/21 01:32 01:47	54	34	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 80-83 dBA, Moorebank Ave Traffic 45-47 dBA	Yes
28	39 Anzac Rd	Night	35	52	30/03/21 01:47 02:02	53	34	Note 1	Note 1	Background noise dominated by Anzac Rd: Road Traffic 80-83 dBA, Moorebank Ave Traffic 38-41 dBA	Yes
<b>M3 - Casula</b>											
29	St Andrews Park	Day	35	-	25/03/21 11:26 11:41	55	42	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 50-51 dBA, Rail Traffic 71-72 dBA, Construction 50-52 dBA	Yes
30	St Andrews Park	Day	35	-	25/03/21 11:43 11:58	62	41	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 54-55 dBA, Construction 50-52 dBA, Birds 60-62 dBA, Rail Traffic 79-80 dBA, Children Playing 55-56 dBA	Yes
31	St Andrews Park	Day	35	-	25/03/21 12:00 12:15	55	42	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 53-54 dBA, Construction 51-52 dBA, Rail Traffic 73-74 dBA	Yes
33	St Andrews Park	Evening	35	-	29/03/21 19:49 20:04	57	48	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 52-53 dBA, Construction 47-50 dBA, Rail Traffic 72-74 dBA	Yes
34	St Andrews Park	Evening	35	-	29/03/21 20:04 20:19	59	49	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 55-56 dBA, Construction 50-52 dBA, Rail Traffic 70-75 dBA	Yes
34	St Andrews Park	Evening	35	-	30/03/21 20:10 20:25	59	42	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 51-54 dBA, Rail Traffic 70-72 dBA	Yes

35	St Andrews Park	Evening	35	-	30/03/21 20:25 20:40	56	42	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 53-55 dBA, Rail Traffic 72-73 dBA	Yes
36	St Andrews Park	Night	35	52	29/03/21 23:18 23:33	57	39	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 42-45 dBA, Rail Traffic 71-72 dBA	Yes
37	St Andrews Park	Night	35	52	29/03/21 23:33 23:48	52	38	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 41-43 dBA, Rail Traffic 75-76 dBA	Yes
38	St Andrews Park	Night	35	52	30/03/21 22:43 22:58	56	41	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 40-43 dBA, Rail Traffic 70-72 dBA	Yes
39	St Andrews Park	Night	35	52	30/03/21 22:58 23:13	54	41	Note 1	Note 1	Background noise dominated by the M5 Motorway: M5 Traffic 41-45 dBA, Rail Traffic 70-73 dBA, Near By Road Traffic 64-65 dBA	Yes
<b>M4 - Glenfield</b>											
40	26 Goodenough St	Day	35	-	25/03/21 11:12 11:27	62	49	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 55-58 dBA, Rail traffic 45-46dBA, Lawn mower 69-72 dBA	Yes
41	26 Goodenough St	Day	35	-	25/03/21 11:28 11:43	49	44	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 49-56 dBA, Rail traffic 45-46dBA, Bird 54-55dBA	Yes
42	26 Goodenough St	Day	35	-	25/03/21 11:44 11:59	49	43	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 47-55 dBA, Rail traffic 45-46dBA, Dog Barking 66-67 dBA	Yes
43	26 Goodenough St	Day	35	-	25/03/21 12:03 12:18	51	43	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 51-53 dBA, Rail Traffic 45-46dBA, Car Passby 65-67 dBA	Yes
44	26 Goodenough St	Evening	35	-	29/03/21 20:36 20:51	52	50	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 54-55 dBA, Air Traffic 62-65 dBA, Cricket 55-56 dBA	Yes
45	26 Goodenough St	Evening	35	-	29/03/21 20:51 21:06	51	50	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 55-56 dBA	Yes
46	26 Goodenough St	Evening	35	-	30/03/21 20:53 21:08	52	49	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 55-56 dBA, Animal 55-60 dBA	Yes
47	26 Goodenough St	Evening	35	-	30/03/21 21:08 21:23	53	53	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 55-57 dBA, Cricket 55-56 dBA	Yes
48	26 Goodenough St	Night	35	52	30/03/21 00:06 00:21	47	41	Note 1	Note 1	Background noise dominated by Cambridge Ave: Road Traffic 54-56 dBA, Cricket 55-56 dBA	Yes
49	26 Goodenough St	Night	35	52	30/03/21 00:21 00:36	48	44	Note 1	Note 1	Background noise dominated by noise from Nature: Road Traffic 54-56 dBA, Cricket 54-55 dBA	Yes
50	26 Goodenough St	Night	35	52	30/03/21 23:27 23:42	48	45	Note 1	Note 1	Background noise dominated by noise from Nature: Cricket 54-55 dBA	Yes
51	26 Goodenough St	Night	35	52	30/03/21 23:42 23:57	49	45	Note 1	Note 1	Background noise dominated by noise from Nature: Cricket 54-55 dBA	Yes

Note 1: Since noise levels from the MLP were not audible during the measurement period, it was not possible to estimate the MLP noise contribution

## 5 Discussion

Based on the attended measurement results in Section 4, it can be seen that the measured  $L_{Aeq(15\text{minute})}$  noise levels at all locations and during all measurement periods were above the 35 dB(A) noise limit.

At Location M1 (Wattle Grove), the closest measurement location to the MLP, the measured  $L_{Aeq(15\text{minute})}$  noise level was 40 dB(A) between 01:07am and 01:22am on 30 March. During this period with the quietest ambient noise levels, MLP noise emissions were not audible.

In all cases, the measured  $L_{Aeq(15\text{minute})}$  noise levels were dominated by extraneous noise sources apart from the MLP operations. Noise sources from MLP operations were not audible during any of the measurement periods at all four representative measurement locations. Since MLP noise emissions were not audible, it was not possible to estimate the industrial noise contribution from the MLP facility.

Based on the results of the attended noise measurements performed during the day, evening and night-time periods between 25 March and 30 March 2021, it is concluded that the current noise levels comply with the operational noise limits in SSD 7628 and SSD 6766.

In particular, SSD 7628 Condition B86 requires operational noise monitoring to be performed to compare the actual noise levels with the predicted noise performance at a point in time when the site is 50% occupied. This report has been prepared to comply with this approval condition and the results herein demonstrate compliance with the requirements of B86 a), c), d), e) and h). Compliance with B86 f) is demonstrated on the basis that no operational noise complaints have been received to date. A separate report is currently being prepared to confirm that operational road traffic noise levels on public roads, generated by the project, achieve the requirements in Condition B86 b) and g).

## 6 Conclusion

This report presents the results of airborne noise measurements at four representative receivers in proximity to the Moorebank Logistics Park (MLP). The measurements were performed in accordance with the requirements of the NSW *Industrial Noise Policy* (INP) the Operational noise and vibration management plan to verify compliance with the noise limits in SSD approvals 6766 and 7628. The measurements were performed during the daytime, evening and night-time periods between 25 March and 30 March 2021.

At all measurement locations, the measured  $L_{Aeq(15\text{minute})}$  noise levels were dominated by extraneous noise sources apart from the MLP operations. Noise sources from MLP operations were not audible during any of the measurement periods. Since MLP noise emissions were not audible, it was not possible to estimate the industrial noise contribution from the MLP facility.

Based on the results of the attended noise measurements, and given that MLP noise levels were not audible at any of the measurement locations, it is concluded that the current noise levels comply with the operational noise limits in SSD 7628 and SSD 6766.

In particular, SSD 7628 Condition B86 requires operational noise monitoring to be performed to compare the actual noise levels with the predicted noise performance at a point in time when the site is 50% occupied. This report has been prepared to comply with this approval condition and the results herein demonstrate compliance with the requirements of B86 a), c), d), e) and h). Compliance with B86 f) is demonstrated on the basis that no operational noise complaints have been received to date. A separate report is currently being prepared to confirm that operational road traffic noise levels on public roads, generated by the project, achieve the requirements in Condition B86 b) and g).

## APPENDIX A Description of technical terms

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

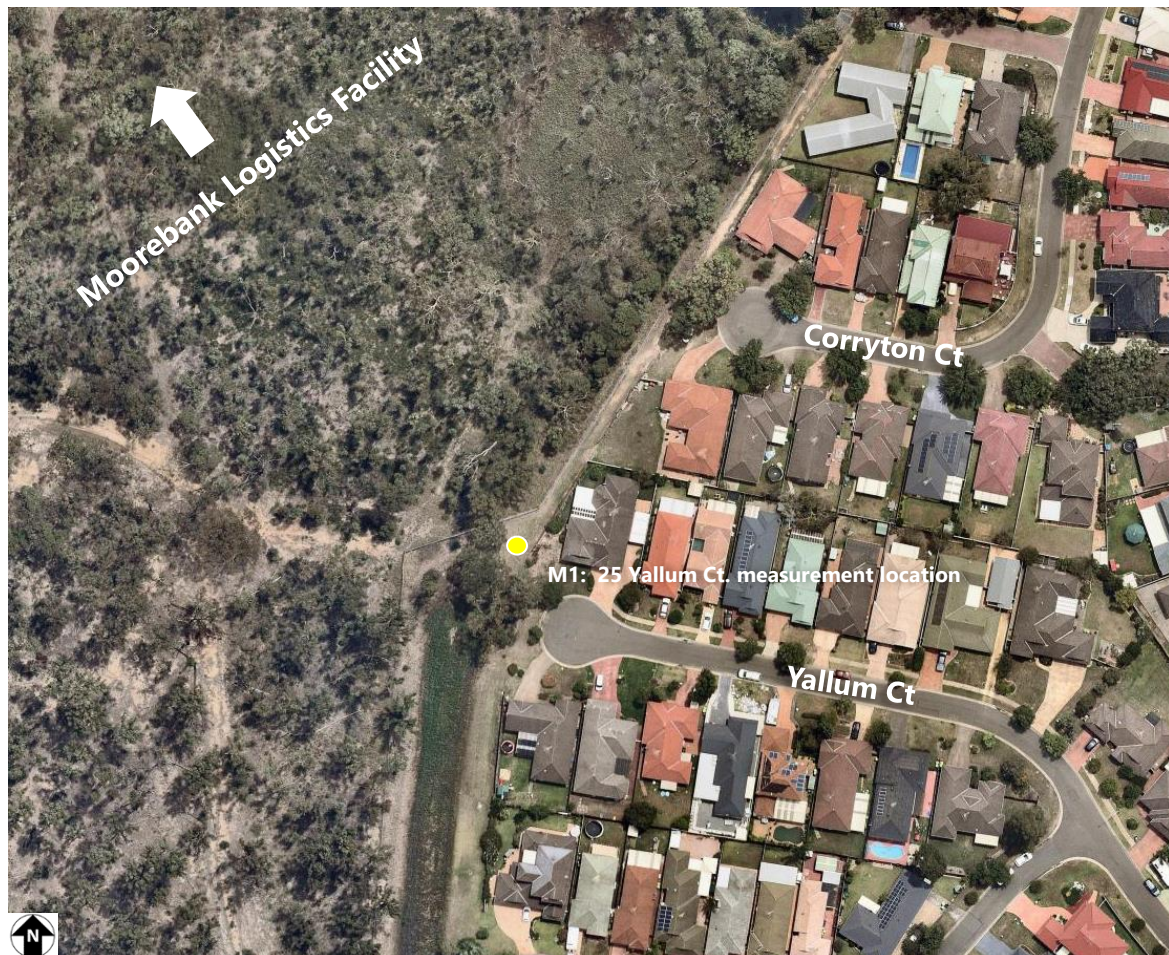
Adverse weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Assessment period	The period in a day over which assessments are made.
Assessment point	A point at which noise measurements are taken or estimated. A point at which noise measurements are taken or estimated.
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level (see below).
Decibel [dB]	The units that sound is measured in. The following are examples of the decibel readings of every day sounds: 0dB The faintest sound we can hear 30dB A quiet library or in a quiet location in the country 45dB Typical office space. Ambience in the city at night 60dB CBD mall at lunch time 70dB The sound of a car passing on the street 80dB Loud music played at home 90dB The sound of a truck passing on the street 100dB The sound of a rock band 115dB Limit of sound permitted in industry 120dB Deafening
dB(A)	A-weighted decibels. The A- weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter.
dB(C)	C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies.
Frequency	Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
LMax	The maximum sound pressure level measured over a given period.
LMin	The minimum sound pressure level measured over a given period.

## APPENDIX B Detailed measurement location descriptions

### B.1 M1 – Wattle Grove measurement location

An aerial photo of Wattle Grove measurement location is provided in Figure B1.

Figure B1 Wattle Grove measurement location



At the Wattle Grove location, noise measurements were performed at a free field measurement positions near the fence facing the facility. Two measurement positions were selected near Corryton Ct and Yallum Ct. At both positions, the microphone was positioned at a height of 1.5 m above ground level. The measurement locations are approximately 770 metres from the MLP. A picture of the measurement setup near Yallum Ct is provided in Figure B2.

**Figure B2**      **25 Yallum Ct measurement location**



## B.2 M2 - Wattle Grove North measurement location

An aerial photo of the Wattle Grove North measurement location is provided in Figure B3.

Figure B3 Wattle Grove North measurement location



At Wattle Grove North, noise measurements were performed at a free field measurement locations on both sides of Anzac Road. At both positions, the microphone was positioned at a height of 1.5 m above ground level. The measurement location is approximately 1050 meters from MLP. Pictures of the measurements setup near Anzac Rd are provided in Figure B4.

Figure B4 Anzac Road measurement locations



### B.3 M3 – Casula measurement location

An aerial photo of the Casula measurement locations is provided in B5.

Figure B5 Casula measurement location



At Casula, noise measurements were performed at a free field measurement location within St Andrews Park. The microphone was positioned at a height of 1.5 m above ground level. Measurements were performed at two locations due to safety considerations during the night-time measurements. The measurement location is approximately 960 meters from MLP. A picture of the measurement setup is provided in Figure B6.

Figure B6 St Andrews Park measurement locations



## B.4 M4 - Glenfield measurement location

An aerial photo of the Glenfield measurement locations is provided in Figure B7.

Figure B7 Glenfield measurement location



At Glenfield, noise measurements were performed at a free field measurement location at the eastern end of Goodenough St. At this position, the microphone was positioned at a height of 1.5 m above ground level. The measurement location is approximately 1250 meters from MLP. Pictures of the measurement setup are provided in Figure B8.

Figure B8 26 Goodenough Road measurement location



# MOOREBANK LOGISTICS PARK – PRECINCT EAST

Operational Air Quality Six Monthly Compliance Report #2  
November 2020 – April 2021

04 JUNE 2021





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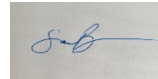


## MOOREBANK LOGISTICS PARK – PRECINCT EAST

### Operational Air Quality Six Monthly Compliance Report #2

November 2020 – April 2021

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**Approver** Heather Tilley



**Report No** PREC-ARC-EN-RPT-0011

**Date** 4/06/2021

**Revision Text** 001

This report has been prepared for Tactical Group in accordance with the terms and conditions of appointment for MLP East Precinct Operational Air Monitoring Program dated 20 December 2019. Arcadis Australia Pacific Pty Limited (ABN 76 104 485 289) cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.

### REVISIONS

Revision	Date	Description	Prepared by	Approved by
000	2/06/2021	Submission to Tactical Group for review	SB	HT
001	4/06/2021	Revised based on comments from Tactical Group	SB	HT



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# 1 INTRODUCTION

## 1.1 Background

The Moorebank Logistics Park – Precinct East Operational Air Quality Monitoring Programme Framework (OAQMPF) provides a framework to monitor air quality during operation of the Moorebank Logistic Park (MLP) Precinct East and has been developed to support the implementation of the Operational Air Quality Management Plan (OAQMP) monitoring and reporting requirements. The OAQMP includes requirements of the:

- EPBC Act Approval (2011/6229) Condition of Approval (CoA) 8f) which requires the implementation of a comprehensive air quality monitoring program (including locations, frequency and duration)
- Moorebank Precinct East (MPE) Stage 1 (SSD 6766):
  - Condition of Consent (CoC) F4(f)(iv) which requires measurement of air emissions generated by the Facility
  - Final Compilation of Mitigation Measures (FCMM) 2C which requires the implementation of an air quality monitoring programme during operation for nuisance dust and air emissions [PM<sub>10</sub><sup>1</sup> and nitrogen dioxide (NO<sub>2</sub>)].
- MPE Stage 2 (SSD 7628):
  - CoC C21(c)(iii) which requires the submission of six-monthly operational compliance reports for the life of the project
  - CoC B59(d)(i), (ii), (iii), (iv) and (vii) which require the identification of air quality monitoring methods and implementation of compliance monitoring for all emissions associated with operations of the Facility
  - FCMM 3C which requires real-time boundary monitoring be undertaken during operation of the Facility.

## 1.2 Site operation

The MLP Operational Environmental Management Plan (OEMP) and sub-plans are applicable to the entire MLP Precinct East. The MLP Precinct East operates 24 hours, 7 days a week. This currently includes operation of the IMEX terminal, Rail Link, Warehouse 1, Warehouse 3, Warehouse 4 and Warehouse 5. Construction related to the remaining elements of MPE Stage 2 is ongoing and is being undertaken during standard working hours.

Moorebank Precinct West (MPW) Stage 2 is located west of Moorebank Avenue and is currently under construction. MPW Stage 2 is a separate project and operates under a different approval (SSD 7709) to MLP Precinct East. MPW Stage 2 has been granted approval to receive imported material outside of standard construction hours.

## 1.3 Purpose of the report

This six-monthly air quality report has been prepared to meet reporting requirements of the CoC as outlined in Section 5 of the OAQMPF.

This six-monthly air quality report includes:

- Summary of air quality data as graphs and tables (Appendix A)
- Weather data (Section 3)

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<sup>1</sup> PM<sub>10</sub> - Particles with a diameter of 10 micrometres or less, which are small enough to pass through the throat and nose and enter the lungs

- Identification of exceedances, complaints or ad hoc monitoring undertaken (Section 4)
- An overview of any investigations undertaken to determine the cause of the exceedance or complaint (Section 4.2 and 4.3).

## 1.4 Reporting period

The MLP Precinct East operations commenced on 13<sup>th</sup> May 2020.

This six-monthly internal air quality report has been prepared to provide an overview of operational air quality results for the six month operational period from 1<sup>st</sup> November 2020 to 30<sup>th</sup> April 2021 (inclusive) to inform the six-monthly operational compliance reports required for the life of the project.

## 1.5 Limitations

All findings contained in this report are based on downloaded monitoring data at the time of writing the report and information relating to air quality provided by Tactical Group. Arcadis do not take responsibility for the accuracy or limitations of the downloaded data.

## 2 OVERVIEW

### 2.1 Air quality monitors

The dust and air quality monitoring system installed at the MLP East Precinct comprises four Cairnet air quality units integrated with Sentinel™ software, which is hosted in the cloud. The system has been provided by EMS Brüel & Kjaer.

The Cairnet unit measures the following dust and air quality parameters:

- NO<sub>2</sub> (range: 0-25 ppb)
- PM<sub>10</sub>
- PM<sub>2.5</sub> (range: 0-1000 µg/m<sup>3</sup>)
- CO (installed since March 2020).

### 2.2 Monitoring locations

The locations of the continuous air quality monitoring stations are identified on Figure 2-1. For this reporting period, the site boundary was considered to be representative of the closest receptors (including the adjacent commercial premises).

The locations of the air quality monitors means the activities for both MLP Precinct East and MPW Stage 2 have been captured.

### 2.3 Air quality monitoring station availability

A summary of availability (time of operation) of the continuous air quality monitoring stations is summarised in Table 2-1, with the most recent calibration date stated.

Table 2-1: Monitoring station uptime (%)

Monitoring station	November 2020	December 2020	January 2021	February 2021	March 2021	April 2021	Average	Calibration <sup>#</sup>
AQM01	100	100	100	100	99	100	100	Feb 2021 <sup>^</sup>
AQM02	100	100	100	100	95	100	99	Jan/Feb 2021
AQM03	66	100	100	100	100	48	85	Feb 2021 <sup>^</sup>
AQM04	100	8	0	0	0	0	18	Jan/Feb 2021

<sup>#</sup>Latest calibration date. Gauges were not calibrated for particulate matter.

<sup>^</sup>CO was not calibrated, only NO<sub>2</sub>.

The availability of AQM3 and AQM4 has been problematic throughout the reporting period. AQM3 has since been removed from site for maintenance and AQM4 has been repaired. The availability of both monitoring stations will be confirmed in the next monthly report.

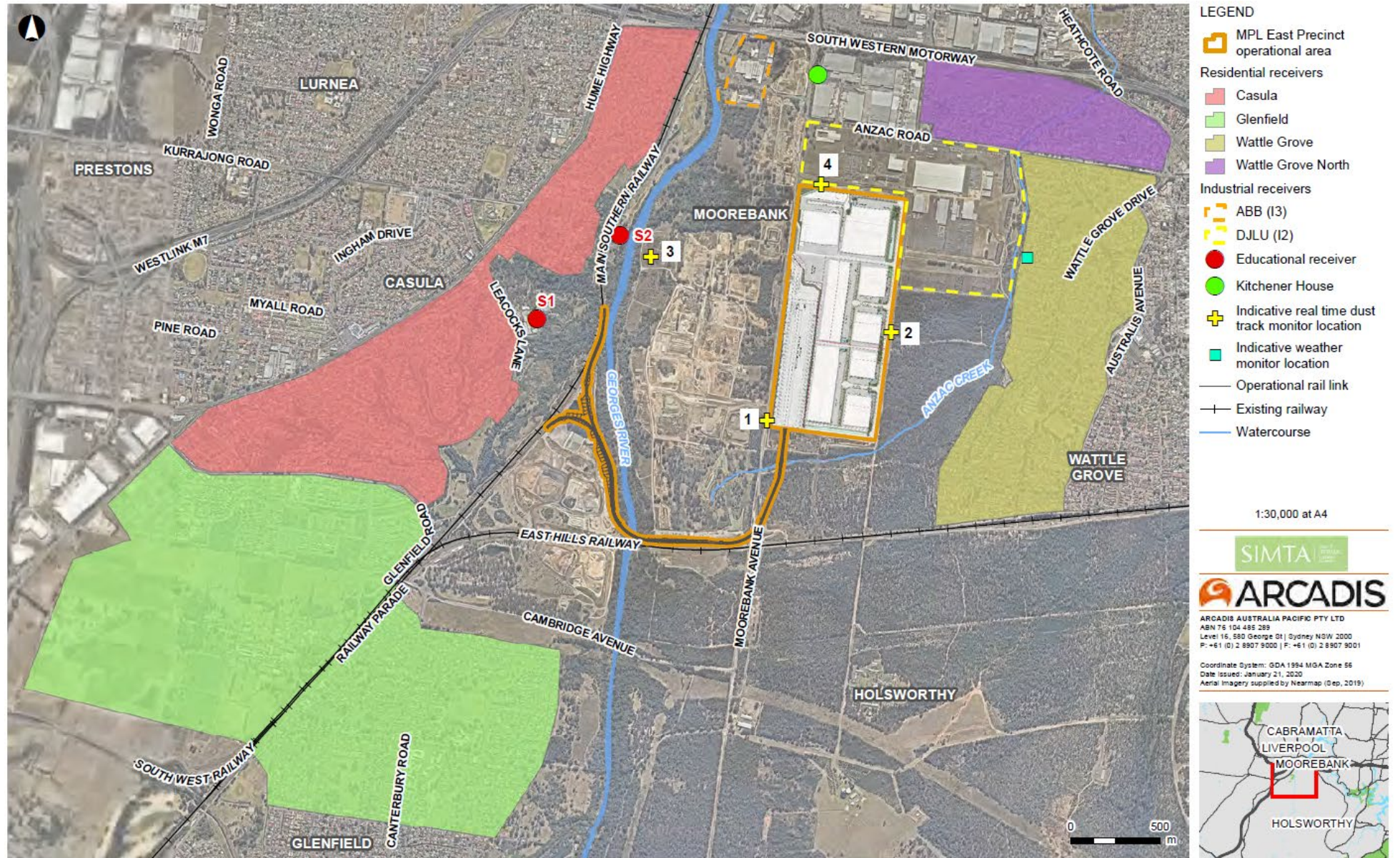


Figure 2-1: Continuous real-time air quality monitors

## 3 WEATHER

### 3.1 Meteorological Conditions

#### 3.1.1 Prevailing wind conditions

Prevailing winds influence the dispersion of dust, and other air emissions potentially generated by the Facility.

Figure 3-1 shows the wind roses of recorded wind speed and direction data from a weather monitor located in Wattle Grove (around 500 m east of MLP Precinct East) for January 2021 through to April 2021. Due to a data download error, prevailing wind conditions for November 2020 and December 2020 were unavailable.

The recorded wind pattern during the reporting period was dominated by mainly northerly and westerly component airflow. Average recorded wind speed during the reporting period were generally low, around 0.5 m/s, indicating generally “calm” (i.e., winds less than 0.5 m/s) to “light air” conditions<sup>2</sup> (i.e., winds between 0.5-1.5 m/s).

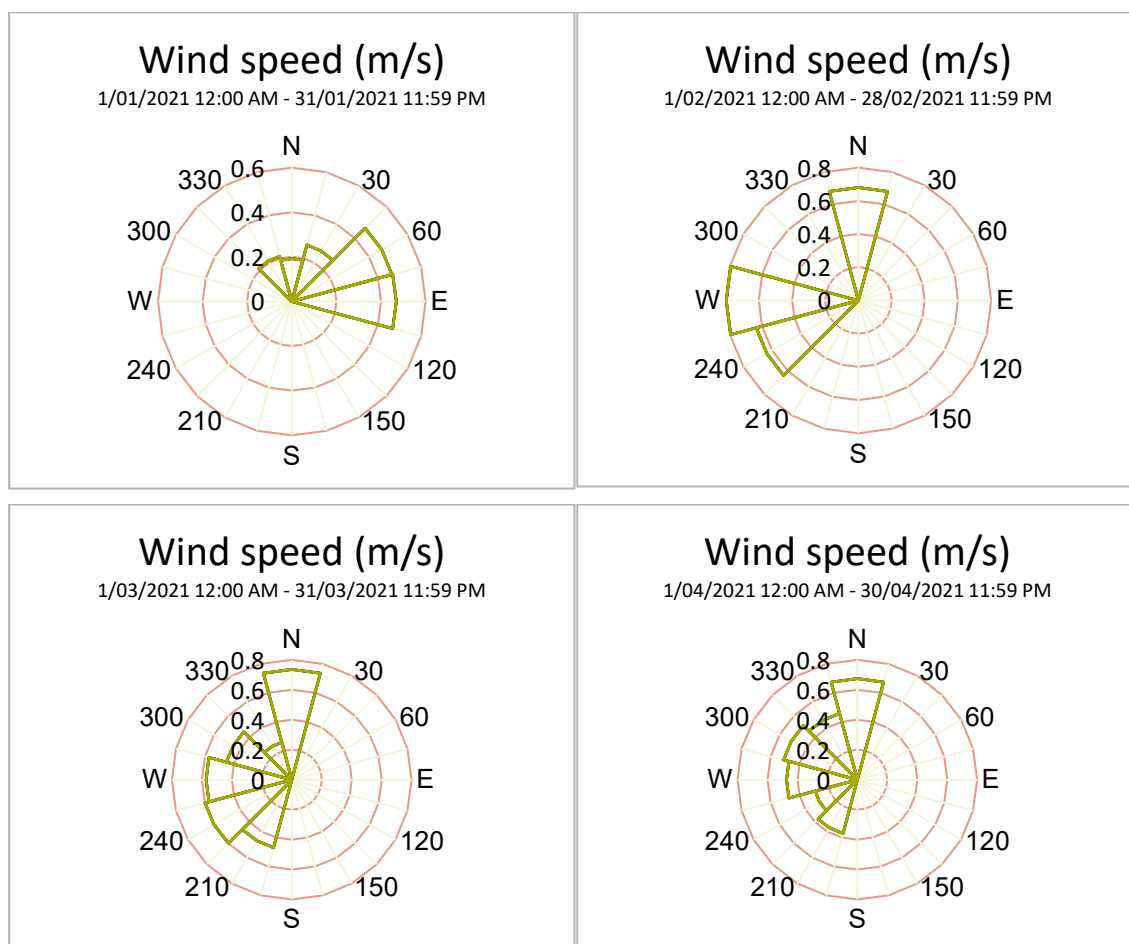


Figure 3-1: Wind roses (January to April 2021)

<sup>2</sup> Descriptions are based on the Beaufort Wind Scale <https://www.weather.gov/mfl/beaufort>

### 3.1.2 Ambient temperature and rainfall

Monthly mean maximum temperatures and total rainfall recorded at the Bankstown Airport automatic weather station (AWS) is summarised in Table 3-1.

Table 3-1: Temperature

Month	Mean minimum temperature (°C)	Mean maximum temperature (°C)	Total rainfall (mm)
November 2020	15.6	27.5	47.2
December 2020	17.4	27.0	63.0
January 2021	18.0	28.9	40.6
February 2021	18.1	26.8	82.0
March 2021	16.3	25.6	339.0
April 2021	11.3	24.3	4.2

Bankstown, NSW - April 2021 - Daily Weather Observations ([bom.gov.au](http://bom.gov.au))

### 3.2 Ambient Air Quality

Since November 2020, the Department of Planning Industry and Environment (DPIE) has implemented air quality categories (AQC) for NSW. These categories are based on air quality data readings which are taken continuously from the various monitoring sites throughout NSW, and are averaged to give hourly and daily air quality information. DPIE use minute data, and report concentrations as hourly and daily averages. All averages are arithmetic means. Air quality data is updated hourly and a daily air quality forecast is made for the Greater Sydney Metropolitan Region at 4pm each day.

The AQC is generally used by government agencies to communicate to the public how polluted the air currently is or how polluted it is forecast to become. The AQC range from 'Good' to 'Extremely Poor' and are summarised in Figure 3-2<sup>3</sup>.

Air quality categories (AQC)							
Air pollutant	Averaging period	Units	GOOD	FAIR	POOR	VERY POOR	EXTREMELY POOR
Ozone O <sub>3</sub>	1-hour	pphm	<6.7	6.7–10.0	10.0–15.0	15.0–20.0	20.0 and above
	4-hour rolling	pphm	<5.4	5.4–8.0	8.0–12.0	12.0–16.0	16.0 and above
Nitrogen dioxide NO <sub>2</sub>	1-hour	pphm	<8	8–12	12–18	18–24	24 and above
Visibility Neph	1-hour	bsp	<1.5	1.5–3.0	3.0–6.0	6.0–18.0	18.0 and above
Carbon monoxide CO	8-hour rolling	ppm	<6.0	6.0–9.0	9.0–13.5	13.5–18.0	18.0 and above
Sulfur dioxide SO <sub>2</sub>	1-hour	pphm	<13.3	13.3–20.0	20.0–30.0	30.0–40.0	40.0 and above
Particulate matter < 10 µm PM <sub>10</sub>	1-hour	µg/m <sup>3</sup>	<50	50–100	100–200	200–600	600 and above
Particulate matter < 2.5 µm PM <sub>2.5</sub>	1-hour	µg/m <sup>3</sup>	<25	25–50	50–100	100–300	300 and above

Figure 3-2: Air quality categories

<sup>3</sup> <https://www.environment.nsw.gov.au/topics/air/understanding-air-quality-data/air-quality-categories>

The PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub> and CO air quality data from the Liverpool<sup>4</sup> monitoring station was reviewed for the six-month reporting period. Below is a summary of the review:

- Using the AQC metric, baseline air quality for the Liverpool area for particles (PM<sub>10</sub> and PM<sub>2.5</sub>) identified that the AQC monthly average derived from 1 hour average for each month since November 2020 were generally 'Good' with daily exceptions that ranged from 'Good' to 'Extremely Poor'. The 'Extremely Poor' category results were recorded towards the end of April 2021 and coincided with hazard reduction burns.
- The NO<sub>2</sub> (ppm) maximum 1 hourly average data and CO (ppm) maximum rolling 8 hourly average data remained in the 'Good' category throughout the six months.

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<sup>4</sup> Data download facility | NSW Dept of Planning, Industry and Environment

## 4 MONITORING RESULTS

### 4.1 Overview

Monitoring data has been summarised into tables and graphs for PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub> and CO and are provided in Appendix A. The monitoring results have been assessed against the criteria identified in Table 4-1.

Table 4-1: Monitoring criteria

Monitoring focus	Averaging period	Criteria / Trigger
PM <sub>2.5</sub>	24 hour average	25 µg/m <sup>3</sup>
	Annual average	8 µg/m <sup>3</sup>
PM <sub>10</sub>	24 hour average	50 µg/m <sup>3</sup>
	Annual average	25 µg/m <sup>3</sup>
NO <sub>2</sub>	1 hour average	246 µg/m <sup>3</sup>
	Annual average	62 µg/m <sup>3</sup>
CO	1 hour average	30 mg/m <sup>3</sup>
	8 hour average	10 mg/m <sup>3</sup>

### 4.2 Exceedances

#### 4.2.1 Annual exceedances

Continuous air quality monitoring for operations commenced on 13<sup>th</sup> May 2020 and therefore almost a full year of data is now available to review the annual exceedances. The combined rolling average for monitoring during this reporting period is shown in tables and charts provided in Appendix A.

The combined rolling average is below the annual average criteria for PM<sub>2.5</sub>, PM<sub>10</sub> and NO<sub>2</sub>. 24-hour exceedances.

Note that CO only includes 8 hour averages for reporting purposes, therefore the annual average is not stated.

#### 4.2.2 24-hour exceedances

##### 4.2.2.1 PM<sub>2.5</sub> Monitoring

Three exceedances of the 25 µg/m<sup>3</sup>/day limit were recorded during the reporting period. These are summarised Table 4-2. The table includes the 24-hour average for PM<sub>2.5</sub> recorded at the Liverpool monitoring station for comparison and includes analysis of the exceedance.

##### 4.2.2.2 PM<sub>10</sub> Monitoring

Ten exceedances of the 50 µg/m<sup>3</sup>/day limit were recorded during the reporting period. These are summarised in Table 4-3. The table includes the 24-hour average for PM<sub>10</sub> recorded at the Liverpool monitoring station for comparison and includes analysis of the exceedance.

Table 4-2: Summary of exceedances of the PM<sub>2.5</sub> 25 µg/m<sup>3</sup>/day limit

Date of exceedance	AQM01	AQM02	AQM03	AQM04	Liverpool 24-hour average <sup>5</sup>	Analysis of exceedance	Train operation
20/03/2021	-	27.1	-	-	4.6	Analysis of monitoring data identified that that the high 24-hour average correlated to the higher PM <sub>2.5</sub> readings that occurred between 6 PM and 12 AM.  The Bankstown BOM recorded wind gusts up to 56 km/h and 48 km/h on 20 March 2021 and 21 March 2021.	Train entered MLP Precinct East at 12:57 PM.
21/03/2021	-	31.1	-	-	6.0	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>2.5</sub> readings that occurred between 12 AM and 1 PM.	Train exited MLP Precinct East at 13:45 PM.
06/04/2021	-	-	78.3 <sup>^</sup>	-	4.9	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>2.5</sub> readings that occurred between 2 AM and 6 AM.	No trains operated on this day

<https://www.environment.nsw.gov.au/topics/air/monitoring-air-quality/sydney/monitoring-stations/liverpool>

<sup>^</sup>This may be an erroneous figure as the PM<sub>10</sub> reading was the same

<sup>5</sup> The 24-hour average is the average of the 1-hour averages recorded for the day (i.e. between 01:00 and 24:00)

Table 4-3: Summary of exceedances of the PM<sub>10</sub> 50 µg/m<sup>3</sup>/day limit

Date of exceedance	AQM01	AQM02	AQM03	AQM04	Liverpool 24-hour average <sup>6</sup>	Analysis of exceedance	Train operation
2/12/2020	-	64.4	-	-	38.1	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred in either late evening or early morning periods.  The Liverpool monitoring gauge was classified as 'Fair' on this day <sup>7</sup> .	No trains operated on this day.
16/12/2020	-	77.3	-	-	15.6	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred in either evening or early morning periods.	No trains operated on this day.
29/01/2021	-	91.5	-	-	11.7	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred between 1 PM and 10 PM.	Train entered MLP Precinct East at 11:18 PM.
13/02/2021	-	55.0	-	-	16.0	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred between 12 AM and 9 AM.	Six trains entered and exited MLP Precinct East between 10 AM and 10 PM.
20/03/2021	-	124.1	-	-	14.5	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred at most times throughout the day, although consistently higher from about 5 PM.  The Bankstown BOM recorded wind gusts varying from 37 to 56 km/h from 20-23 March 2021.	Train entered MLP Precinct East at 12:57 PM.
21/03/2021	-	155.5	-	-	19.2	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred between 12 AM and 4 PM.	Train exited MLP Precinct East at 1:45 PM.
22/03/2021	-	86.6	-	-	8.0	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred sporadically throughout the day, although consistently higher between 12 AM and 6 AM.	Six trains entered and exited MLP Precinct East between 1:00 PM and 11:30 PM.

<sup>6</sup> The 24-hour average is the average of the 1-hour averages recorded for the day (i.e. between 01:00 and 24:00)

<sup>7</sup> This was the only day the Liverpool monitoring gauge was classified as 'Fair' when exceedances occurred. All other exceedances identified were reported as 'Good' days at Liverpool monitoring station.

Date of exceedance	AQM01	AQM02	AQM03	AQM04	Liverpool 24-hour average <sup>6</sup>	Analysis of exceedance	Train operation
23/03/2021	-	59.6	-	-	6.2	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred between 12 AM and 8 AM.	Four trains entered and exited MLP Precinct East between 12:00 AM and 1:30 PM.
06/04/2021	-	-	78.3 <sup>^</sup>	-	13.8	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred between 2 AM and 6 AM.	No trains operated on this day
09/04/2021	-	51.9	-	-	21.8	Analysis of monitoring data identified that that the high 24-hour average correlated to higher PM <sub>10</sub> readings that occurred between 3 AM and 8 AM	No trains operated on this day

<https://www.environment.nsw.gov.au/topics/air/monitoring-air-quality/sydney/monitoring-stations/liverpool>

<sup>^</sup>This may be an erroneous figure as the PM<sub>2.5</sub> reading was the same

## **4.2.3 CO and NO<sub>2</sub> exceedances**

### **4.2.3.1 1-hour exceedances**

No 1-hour criteria exceedances for NO<sub>2</sub> and CO occurred during the reporting period for NO<sub>2</sub>.

### **4.2.3.2 8-hour exceedances**

No 8-hour criteria exceedances for CO occurred during the reporting period.

Due to different units of measurement and criteria e.g., mg/m<sup>3</sup> and ppm or ppb and µg/m<sup>3</sup>, a pressure of one atmosphere (1013 mb) and a temperature of 25°C were assumed during conversion between units.

## **4.3 Complaints**

No complaints in relation to air quality were received in the reporting period.

## **4.4 Ad-hoc monitoring**

No ad-hoc monitoring was undertaken between November 1<sup>st</sup> 2020 and April 30<sup>th</sup> 2021.

## 5 CONCLUSION

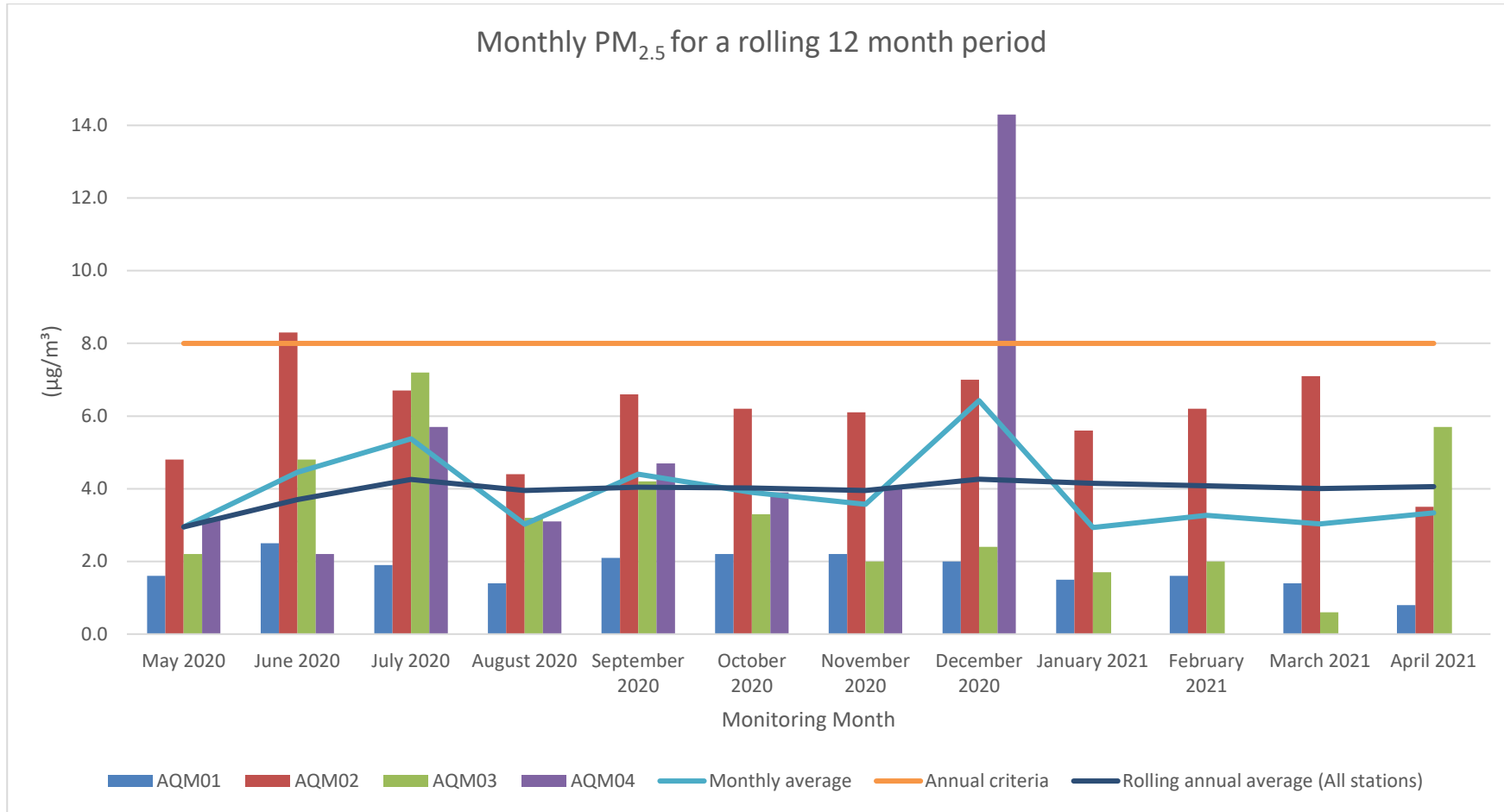
This six-monthly operational air quality report for the reporting period notes the following:

- No exceedances of the annual average criteria has occurred for either PM<sub>2.5</sub>, PM<sub>10</sub> or NO<sub>2</sub>.
- No exceedances of the 1-hour average criteria or annual average criteria has occurred for NO<sub>2</sub> or CO.
- Exceedances of the 24-hour average criteria occurred for PM<sub>2.5</sub> and PM<sub>10</sub>
  - There were three exceedances (out of 181 days) of the PM<sub>2.5</sub> 24-hour average criteria during the reporting period (1.7%).
  - There were 10 exceedances (out of 181 days) of the PM<sub>10</sub> 24-hour average criteria during the reporting period (about 5.5%).
  - Most of the exceedances occurred in March 2021.
  - Hazard reduction burns occurred towards the end of April 2021, impacting air quality.
  - The majority of exceedances occurred when no trains were entering or exiting.
  - The exceedances mostly correlate to higher readings during the evening and early morning periods.
  - Investigations at MLP Precinct East upon receipt of the exceedances has not identified significant dust or emissions issues from MLP Precinct East.
  - Most exceedances were recorded at AQM02 which is the monitor located on the eastern boundary. Exceedances at AQM02 predominantly occurred in March 2021. Causes of the recorded exceedance is unclear as Warehouse 3 and Warehouse 4 are sealed and no OOHW's have been undertaken during the reporting period.
  - MPW Stage 2 has approval to receive imported material outside of standard construction hours. Import of material was occurring at times during December 2020 and January 2021, although was unlikely to contribute to the exceedances at AQM03.
  - AQM01 is the monitor located closest to the MLP Precinct East rail siding. As shown in Table 4-2 and Table 4-3, no exceedances were recorded at AQM01, and as such it is unlikely that operations at MLP Precinct East are impacting air quality in the immediate area.
  - AQM04 was offline for a large time period affecting reporting outcomes. It is noted that the monitor is back online as of May 2021.
  - AQM03 has experienced some low availability during the reporting period. It is noted that this monitor has now been removed from site for maintenance.

## APPENDIX A

Rolling particulate data (PM<sub>2.5</sub>)

Month	Average AQM01 (µg/m <sup>3</sup> )	Average AQM02 (µg/m <sup>3</sup> )	Average AQM03 (µg/m <sup>3</sup> )	Average AQM04 (µg/m <sup>3</sup> )	Months Average All stations (µg/m <sup>3</sup> )	Rolling annual average All stations (µg/m <sup>3</sup> )	Annual average criteria (µg/m <sup>3</sup> )	Comments
May 2020	1.6	4.8	2.2	3.2	3.0	3.0	8	No exceedance of annual average criteria
June 2020	2.5	<b>8.3</b>	4.8	2.2	4.5	3.7	8	Individually, PM <sub>2.5</sub> in June 2020 at AQM02 was higher than annual average criteria, however across the reporting period, AQM02 was below the annual average criteria.
July 2020	1.9	6.7	7.2	5.7	5.4	4.3	8	No exceedance of annual average criteria
August 2020	1.4	4.4	3.2	3.1	3.0	4.0	8	No exceedance of annual average criteria
September 2020	2.1	6.6	4.2	4.7	4.4	4.0	8	No exceedance of annual average criteria
October 2020	2.2	6.2	3.3	3.9	3.9	4.0	8	No exceedance of annual average criteria
November 2020	2.2	6.1	2.0	4.0	3.6	4.0	8	No exceedance of annual average criteria
December 2020	2.0	7.0	2.4	<b>14.3</b>	6.4	4.3	8	Individually, PM <sub>2.5</sub> in December 2020 at AQM04 was higher than annual average criteria, however across the reporting period, AQM04 was below the annual average criteria.
January 2021	1.5	5.6	1.7	No reading	2.9	4.1	8	No exceedance of annual average criteria
February 2021	1.6	6.2	2.0	No reading	3.3	4.1	8	No exceedance of annual average criteria
March 2021	1.4	7.1	0.6	No reading	3.0	4.0	8	No exceedance of annual average criteria
April 2021	0.8	3.5	5.7	No reading	3.3	4.1	8	No exceedance of annual average criteria
All months	1.8	6.0	3.3	5.1	4.0	4.0	8	No exceedance of annual average criteria



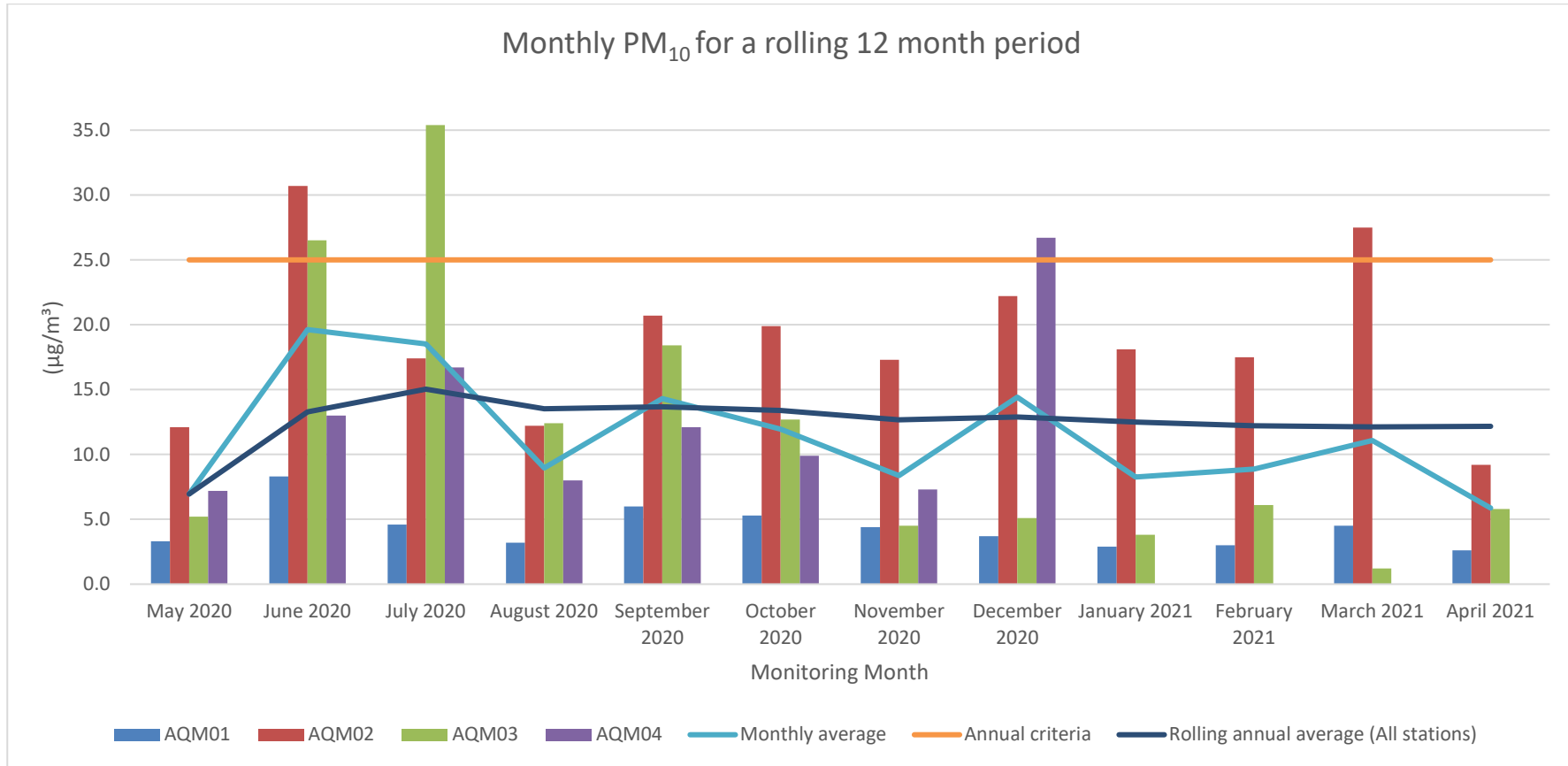
Monthly PM<sub>2.5</sub>

Rolling annual particulate data (PM<sub>10</sub>)

Month	Average AQM01 (µg/m <sup>3</sup> )	Average AQM02 (µg/m <sup>3</sup> )	Average AQM03 (µg/m <sup>3</sup> )	Average AQM04 (µg/m <sup>3</sup> )	Monthly Average (µg/m <sup>3</sup> )	Rolling annual average All stations (µg/m <sup>3</sup> )	Annual average criteria (µg/m <sup>3</sup> )	Comments
May 2020	3.3	12.1	5.2	7.2	7.0	7.0	25	No exceedance of annual average criteria
June 2020	8.3	<b>30.7</b>	<b>26.5</b>	13.0	19.6	13.3	25	Individually, PM <sub>10</sub> in June 2020 at AQM02 and AQM03 was higher than annual average criteria, however across the reporting period, AQM02 and AQM03 were below the annual average criteria.
July 2020	4.6	17.4	<b>35.4</b>	16.7	18.5	15.0	25	Individually, PM <sub>10</sub> in July 2020 at AQ03 was higher than annual average criteria, however across the reporting period, AQM03 was below the annual average criteria.
August 2020	3.2	12.2	12.4	8.0	9.0	13.5	25	No exceedance of annual average criteria
September 2020	6.0	20.7	18.4	12.1	14.3	13.7	25	No exceedance of annual average criteria
October 2020	5.3	19.9	12.7	9.9	12.0	13.4	25	No exceedance of annual average criteria
November 2020	4.4	17.3	4.5	7.3	8.4	12.7	25	No exceedance of annual average criteria
December 2020	3.7	22.2	5.1	<b>26.7</b>	14.4	12.9	25	Individually, PM <sub>10</sub> in December 2020 at AQ04 was higher than annual average criteria, however across the reporting period, AQM04 was below the annual average criteria.
January 2021	2.9	18.1	3.8	No reading	8.3	12.5	25	No exceedance of annual average criteria
February 2021	3.0	17.5	6.1	No reading	8.9	12.2	25	No exceedance of annual average criteria

MLP East Precinct Operational Air Quality Six Monthly Compliance Report #2 – November 2020 to April 2021

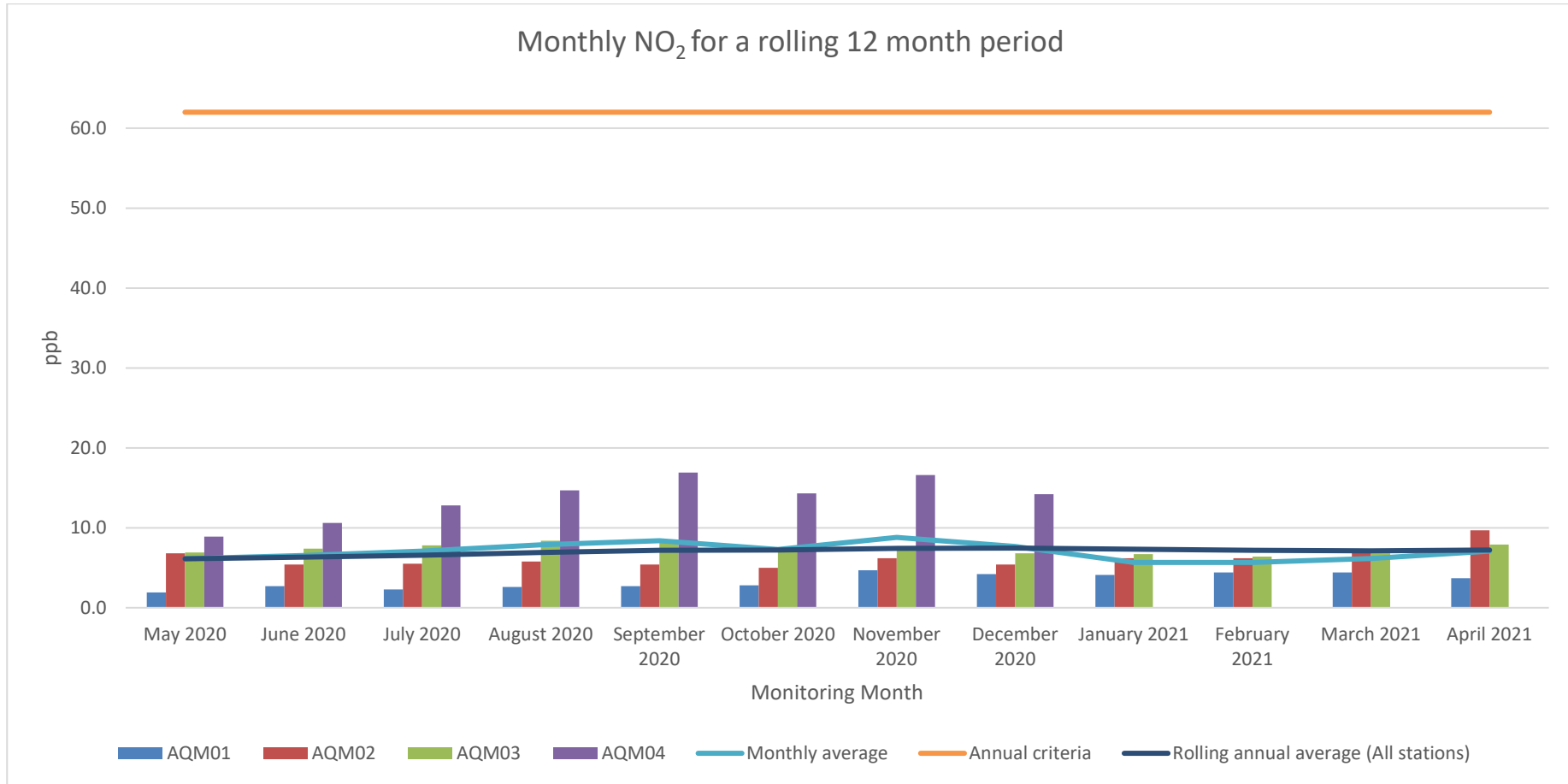
Month	Average AQM01 (µg/m³)	Average AQM02 (µg/m³)	Average AQM03 (µg/m³)	Average AQM04 (µg/m³)	Monthly Average (µg/m³)	Rolling annual average All stations (µg/m³)	Annual average criteria (µg/m³)	Comments
March 2021	4.5	<b>27.5</b>	1.2	No reading	11.1	12.1	25	Individually, PM <sub>10</sub> in March 2021 at AQ02 was higher than annual average criteria, however across the reporting period, AQM02 was below the annual average criteria.
April 2021	2.6	9.2	5.8	No reading	5.9	12.2	25	No exceedance of annual average criteria
All months	4.3	18.7	11.4	12.6	12.1	11.4	25	No exceedance of annual average criteria



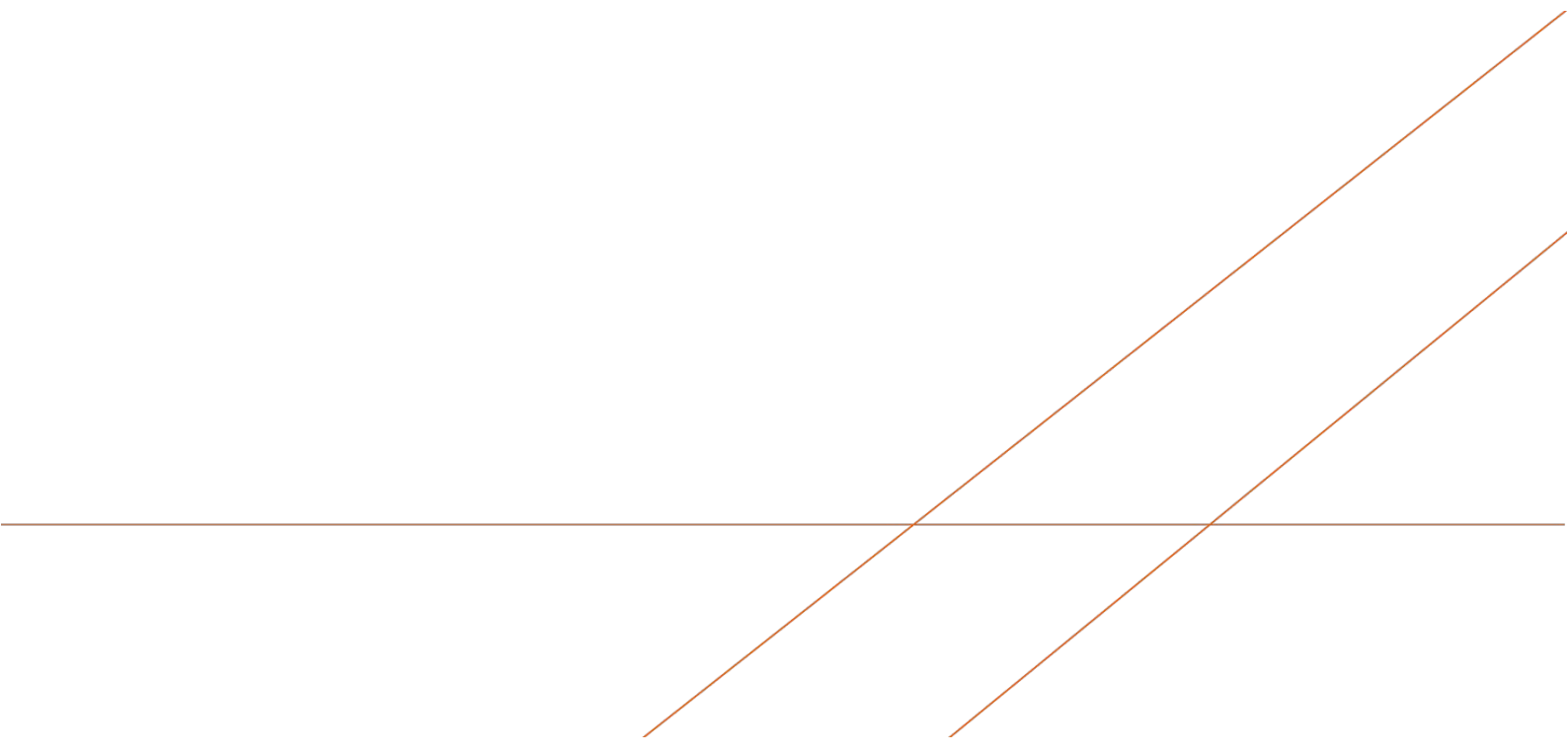
Monthly PM<sub>10</sub>

Rolling monthly and annual particulate data (NO<sub>2</sub>)

Month	Average AQM01 (ppb)	Average AQM02 (ppb)	Average AQM03 (ppb)	Average AQM04 (ppb)	Monthly Average (ppb)	Rolling annual average All stations (ppb)	Annual average criteria (µg/m <sup>3</sup> / ppb)	Comments
May 2020	1.9	6.8	6.9	8.9	6.1	6.1	62 / 32.3	No exceedance of annual average criteria
June 2020	2.7	5.4	7.4	10.6	6.5	6.3	62 / 32.3	No exceedance of annual average criteria
July 2020	2.3	5.5	7.8	12.8	7.1	6.6	62 / 32.3	No exceedance of annual average criteria
August 2020	2.6	5.8	8.4	14.7	7.9	6.9	62 / 32.3	No exceedance of annual average criteria
September 2020	2.7	5.4	8.5	16.9	8.4	7.2	62 / 32.3	No exceedance of annual average criteria
October 2020	2.8	5.0	7.0	14.3	7.3	7.2	62 / 32.3	No exceedance of annual average criteria
November 2020	4.7	6.2	7.7	16.6	8.8	7.4	62 / 32.3	No exceedance of annual average criteria
December 2020	4.2	5.4	6.8	14.2	7.7	7.5	62 / 32.3	No exceedance of annual average criteria
January 2021	4.1	6.2	6.7	No reading	5.7	7.3	62 / 32.3	No exceedance of annual average criteria
February 2021	4.4	6.2	6.4	No reading	5.7	7.2	62 / 32.3	No exceedance of annual average criteria
March 2021	4.4	7.3	6.8	No reading	6.2	7.1	62 / 32.3	No exceedance of annual average criteria
April 2021	3.7	9.7	7.9	No reading	7.1	7.2	62 / 32.3	No exceedance of annual average criteria
All months	3.4	6.2	7.4	13.6	7.1	7.3	62 / 32.3	No exceedance of annual average criteria



Monthly NO<sub>2</sub>





# APPENDIX D - COMPLIANCE REPORT DECLARATION FORM

## COMPLIANCE REPORT DECLARATION


<b>Project Name</b>	Moorebank Logistics Park (MLP) – East Precinct
<b>Project Application Number</b>	SSD 7628
<b>Description of Project</b>	Moorebank Logistics Park aims to streamline the freight logistics supply chain from port to store, deliver savings to businesses and consumers, and help service the rapidly growing demand for imported goods in south-west Sydney. It is located approximately 27 kilometres (km) south-west of the Sydney Central Business District and approximately 26 km west of Port Botany within the Liverpool Local Government Area. The MLP is divided into an East Precinct and a West Precinct, located east and west of Moorebank Avenue respectively. The East Precinct includes the 24/7 operation of an import-export terminal (IMEX), rail link connecting to the South Sydney Freight Line (SSFL), warehousing and distribution facilities and freight village.
<b>Project Address</b>	Moorebank Logistics Park, Moorebank, NSW, 2170
<b>Proponent</b>	Qube Holdings Limited (ACN: 149 723 053)
<b>Title of Compliance Report</b>	Moorebank Logistics Park East Precinct – Pre-operation Compliance Report
<b>Date</b>	Tuesday, 15 June 2021

I declare that I have reviewed relevant evidence and prepared the contents of the attached Compliance Report and to the best of my knowledge:

- the Compliance Report has been prepared in accordance with all relevant conditions of consent;
- the Compliance Report has been prepared in accordance with the Compliance Reporting Post Approval Requirements;
- the findings of the Compliance Report are reported truthfully, accurately and completely;
- due diligence and professional judgement have been exercised in preparing the Compliance Report; and
- the Compliance Report is an accurate summary of the compliance status of the development.

### Notes:

- Under section 10.6 of the Environmental Planning and Assessment Act 1979 a person must not include false or misleading information (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and
- The Crimes Act 1900 contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years' imprisonment or 200 penalty units, or both).

<b>Name of Authorised Reporting Officer</b>	Richard Mason
<b>Title</b>	MD Possum Environmental Consulting
<b>Signature</b>	
<b>Qualification</b>	Bachelor of Science – Environmental Science
<b>Company</b>	Possum Environmental Consulting
<b>Company Address</b>	2 Carole Avenue, Baulkham Hills NSW 2153