

# NVAQ

Environmental Noise Compliance Monitoring

Sydney International Container Terminal

Hutchinson Ports Australia

JULY 2025

Gate B, 150-160 Foreshore Rd, Botany NSW 2019



## Table of Contents

1.	Introduction .....	4
2.	Scope – Noise Compliance .....	4
3.	Environmental Protection Licence (Noise) .....	4
4.	Site Description .....	6
4.1.	Location and Operations .....	6
4.2.	Adjacent Land Use .....	7
4.2.1.	Industrial and Commercial Uses .....	7
4.2.2.	Residential, Recreation and Open Space Uses .....	8
4.3.	Noise Sensitive Survey Locations .....	8
5.	Noise Compliance Monitoring Methodology .....	9
5.1.	Instrumentation .....	9
5.2.	Measurement Location Details .....	9
5.2.1.	Location 1: 78 Australia Avenue, Matraville .....	9
5.2.2.	Location 2: 46 Jennings Street, Matraville .....	10
5.2.3.	Location 3: 12 Military Road, Matraville .....	10
5.3.	Weather & Meteorological Conditions .....	10
6.	Compliance Noise Monitoring Results .....	11
6.1.	Unattended Noise Monitoring Results .....	12
6.1.1.	Location 1: 78 Australia Avenue, Matraville .....	12
6.1.2.	Location 2: 46 Jennings Street, Matraville .....	14
6.1.3.	Location 3: 12 Military Road, Matraville .....	16
6.2.	Attended Noise Measurement Results .....	18
6.2.1.	Location 1: 78 Australia Avenue .....	18
6.2.2.	Location 2: 46 Jennings Street .....	19
6.2.3.	Location 3: 12 Military Road .....	20
7.	Statement of Industrial Noise Compliance .....	21
7.1.	Operations .....	21
7.2.	Measured Noise Levels Review .....	21
7.2.1.	Daytime Period .....	21
7.2.2.	Evening time Period .....	21
7.2.3.	Nighttime Period .....	22
8.	Conclusion & Summary .....	22

## Document Control

Document Control	
Document Number	NVAQ-RPT-240038-02-A
Project Name	SICTL – Biannual Environmental Noise Compliance Monitoring
Description	SICTL Noise Monitoring – July 2025
Key Contact	Nick Lynar

Prepared By	
Company	NVAQ Pty Ltd
Address	36 Moore Street, Drummoyne NSW 2047
Phone	+61 436 691 480
Email	info@nvaq.com.au
Website	nvaq.com.au
Author	F. Coloma – Senior Acoustic Consultant
Reviewer	Nick Lynar – Principal Acoustic Consultant
Signature	

Revision	Comments/ Details	Date	Revised By
A	Original Issue	24/02/2025	-

# 1. Introduction

NVAQ Pty Ltd. (NVAQ) was commissioned by Hutchinson Ports Australia (HPA) to conduct the biannual environmental noise compliance monitoring at Sydney International Container Terminal Pty Ltd (SICTL) located at Gate B, 150-160 Foreshore Road, Botany NSW 2019.

The noise monitoring was conducted during normal port operations between 1<sup>st</sup> July to 15<sup>th</sup> July 2025.

The assessment contained within this report was conducted in accordance with the requirements of the SICTL site's current Environment Protection Licence EPL 20322, 1 September 2016, Clauses L3 and E1 at specified locations.

The noise monitoring was conducted during normal port operations and included unloading/loading of several large container ships. The results of the noise compliance monitoring for July 2025 are contained within this report.

Ambient background noise monitoring was conducted at the nearest noise sensitive receivers in the surrounding area of SICTL. A detailed summary of the noise monitoring results is enclosed in this report.

## 2. Scope – Noise Compliance

The scope of work provided to NVAQ for this assessment was as follows:

Prepare a noise compliance assessment for the existing site operations with reference to the NSW Environment Protection Authority (EPA) Environmental Protection Licence (EPL) and other relevant EPA noise guidelines and requirements.

This requires the following items:

- Assess the existing ambient noise environment in the areas surrounding the subject site.
- Compare the measured noise levels to EPL noise limits.
- Provide recommendations for further courses of action (where required).

## 3. Environmental Protection Licence (Noise)

The noise emissions from the on-site operations are required to satisfy specific NSW EPA requirements outlined in the site's EPL (Licence No. 20322).

Condition L3 Noise Limits Specifies:

**L3.1** *Noise from the premises must not exceed the noise limits presented in Table 3-1 below. Note the limits represent the noise contribution at the nominated receiver locations.*

Table 3-1 : Noise Limits -  $L_{Aeq}$ 

Most affected residential location	Day $L_{Aeq}$ (15min)	Evening $L_{Aeq}$ (15min)	Night $L_{Aeq}$ (15min)	Night $L_{Aeq}$ (9hours)
Chelmsford Avenue	40 dB(A)	40 dB(A)	40 dB(A)	38 dB(A)
Dent Street	45 dB(A)	45 dB(A)	45 dB(A)	43 dB(A)
Botany Road	47 dB(A)	47 dB(A)	47 dB(A)	45 dB(A)
Jennings Street	36 dB(A)	36 dB(A)	36 dB(A)	35 dB(A)
Australia Avenue	35 dB(A)	35 dB(A)	35 dB(A)	35 dB(A)
Military Road	42 dB(A)	42 dB(A)	42 dB(A)	40 dB(A)

**L3.2** Noise from the premises must not exceed the noise limits presented in Table 3-2 below. Note the limits represent the noise contribution at the nominated receiver locations.

Table 3-2 : Noise Limits - Night

Most affected residential location	Night $L_{A1}$ (1min)
Chelmsford Avenue	53 dB(A)
Dent Street	59 dB(A)
Botany Road	59 dB(A)
Jennings Street	55 dB(A)
Australia Avenue	57 dB(A)
Military Road	60 dB(A)

**L3.3** For the purposes of Conditions L3.1 and L3.2

Day is defined as the period from 7 am to 6 pm (Monday to Saturday) and 8 am to 6 pm (Sundays and Public Holidays).

Evening is defined by the period from 6 pm to 10 pm on any day.

Night is defined as the period from 10 pm to 7 am (Monday to Saturday) and 10 pm to 8 am (Sundays and Public Holidays).

**L3.4** For the purposes of Condition L3.1 noise from the premises must be measured or computed at the most affected point on or within the residential boundary.

**L3.5** For the purpose of Condition L3.1, if a residential dwelling is located more than 30m from the residential boundary, noise from the premises must be measured or computed at the most affected point within 30m of the dwelling.

**L3.6** Noise from the premises is to be measured at one metre from the dwelling façade to determine compliance with the  $L_{A1}$  (one minute) noise limits in condition L3.2.

**L3.7** The noise limits specified in condition L3.1 and L3.2 apply under the following meteorological conditions:

- a) wind speeds up to 3 m/s at 10 m above ground level
- b) temperature inversion conditions of up to 1.5 degrees C/100 m.

**Condition E1** Noise Monitoring and Compliance Reporting specifies the following:

**E1.1** The licensee must undertake noise monitoring as follows:

- a) The noise monitoring must be undertaken within 6 months of the commencement of operations.
- b) The noise monitoring must verify the assumptions and noise limits as outlined in the Port Botany Container Terminal Expansion Noise Assessment (2003), part of the Environmental Impact Statement submitted to the Department of Planning and Infrastructure in accordance with the Environmental Planning and Assessment Act 1979 for the approved container terminal development, and Conditions L3.1 and L3.2 of this license.

**E1.2** Every 6 months, the Licensee must undertake a periodic noise monitoring program consisting of attended and unattended monitoring and provide a report within one month after completion of monitoring to the EPA's Manager, Sydney Industry at PO Box 668 Parramatta NSW 2124 containing the following information:

- a) Unattended monitoring data for a continuous period of no less than 2 weeks
- b) Attended monitoring data during the period outlined in subsection
- c) Monitoring data from a minimum of three locations specified in Conditions L3.1 and L3.2;
- d) An assessment of the noise levels against Condition L3 including trend analysis; and
- e) Details of any feasible and reasonable noise mitigation measures that have been or are proposed to be implemented further reduce noise levels below the limits prescribed in this license.

## 4. Site Description

### 4.1. Location and Operations

SICTL is located at B150-160 Sirius Road (off Foreshore Road), Botany, New South Wales (NSW) 2019 within Terminal 3 which is part of NSW Ports' Port Botany Expansion (PBE) Project that also includes other port operators and terminals. The SICTL Terminal 3 is situated parallel to the runway at Sydney International Airport.

The site occupies an approximate area of 63 hectares, extending 550 metres west and 1,300 metres north of the existing northern quay of Brotherson Dock. SICTL operates a modern international container terminal at Port Botany with key features being a 1300m Quay Line and two Rail Sidings equal to 1.6km of track.

The SICTL port site operates with the following plant and equipment:

- Six Automated Stacking Cranes (ASC).
- Engineering and Maintenance building – includes workshop and washing bay.
- Two Vessel Berths - HD1 and HD2.
- Four Quay Cranes (QCs).
- Shuttle carriers, reach stackers and other operational equipment.
- Railway sidings and freight train delivery and collection.
- Container yards, including Truck grids

Figure 4-1 shows the SICTL Site Layout, Work Areas & Potential Noise Sources



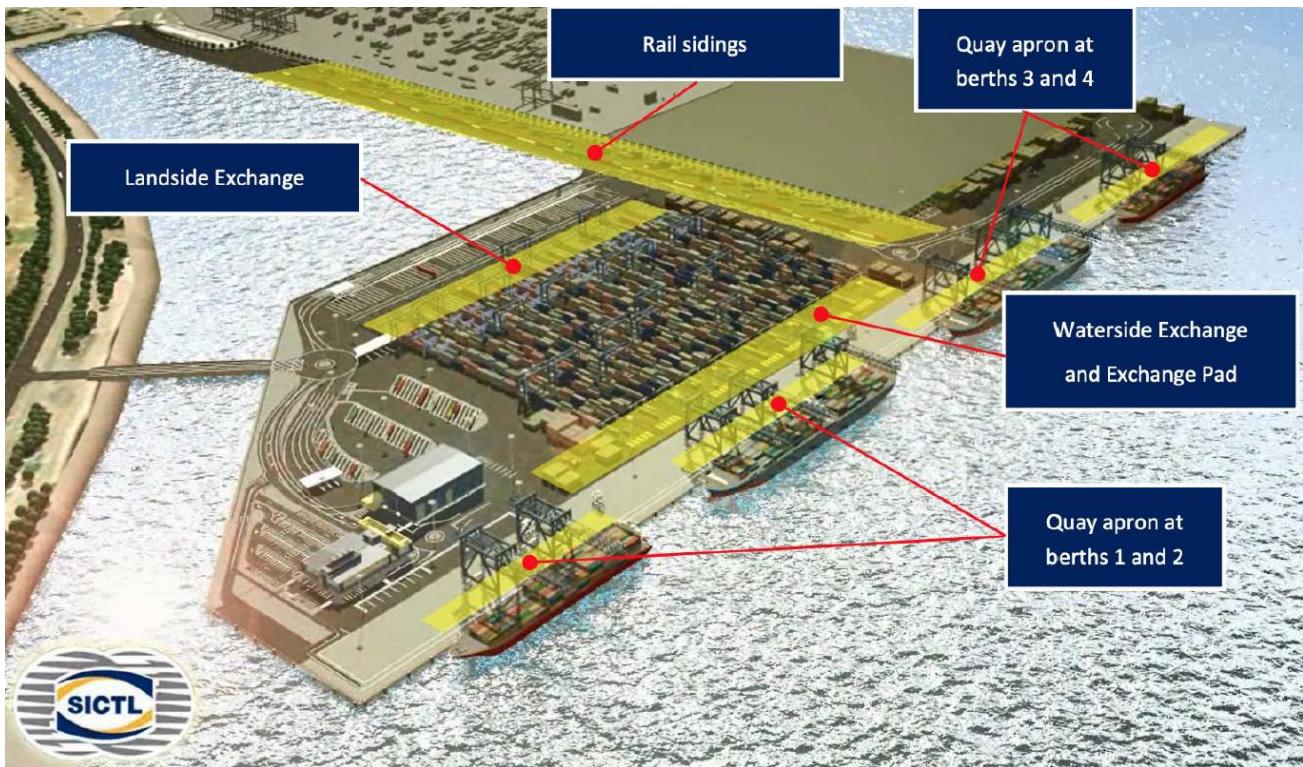


Figure 4-1: SICTL Site Layout, Work Areas & Potential Noise Sources

## 4.2. Adjacent Land Use

Areas surrounding the site comprises industrial, port related, commercial, residential and recreational land uses, as per the descriptions in the following section.

### 4.2.1. Industrial and Commercial Uses

- The main industrial land uses near the terminal include Patrick's Ports Botany Container Terminal, Caltex Oil Terminal, and DP World Australia (DP World container terminal). Several other industrial sites are also in close proximity to the area, such as Opal, Orora Recycling, Orica, BOC, Air Liquid, Mobil and British Petroleum Oil Terminals, Savino Del Bene Australia, Warehouse Solutions International, and Owens Transport. The Botany Industrial Park is approximately 1,000 metres from the site.
- Sydney (Kingsford Smith) Airport, the primary domestic and international airport in Sydney, is roughly 3,000 metres west of the site. The Discovery Cove Business Park, a commercial business centre, is situated near the SICTL on Botany Road.
- A goods freight rail line operates from Port Botany and services SICTL, Patrick's Port Botany, DP World container terminal, Qube Logistics, and Veolia. The line connects with the metropolitan freight and intermodal terminal. Storage for goods occurs at the Cooks River and Botany Goods Yards, SICTL, Patrick's Port Botany container terminal, DP World container terminal, and various nearby transport and logistic facilities, including Sydney Haulage.

#### 4.2.2. Residential, Recreation and Open Space Uses

- Residential land uses are situated to the east, northeast, and northwest of the site, encompassing the suburbs of Botany, Banksmeadow, and Matraville. Residential receivers to the north and northeast are located at distances ranging from 650 meters to 1,000 meters. These identified residential areas are considered nearest to the SICTL facility.
- The nearest educational institutions, as measured from the terminal's northern point, are Banksmeadow Primary School located 1km away and Matraville Primary School, located 1.6km from the site.
- Several recreational areas are present in the surrounding suburbs, including multiple open spaces.

#### 4.3. Noise Sensitive Survey Locations

Details of three noise sensitive survey locations are provided in Table 4-1 and marked on the aerial image in Figure 4-2.

Further details on the survey locations are provided in Section 5.2.

Table 4-1 : Noise Sensitive Receivers Locations

Receiver	Receiver Type	Description
46 Jennings Street, Matraville	Residential	Single storey residential dwelling
78 Australia Avenue, Matraville	Residential	Single storey residential dwelling
12 Military Road, Matraville	Commercial	Graveyard & Crematorium



Figure 4-2: Site Aerial View, Subject Site & Noise Survey Locations



## 5. Noise Compliance Monitoring Methodology

Unattended and attended noise compliance measurements were conducted to quantify the existing ambient noise environment and noise impacts from the Site during normal operations.

A detailed summary of the methodology is provided in the section below.

### 5.1. Instrumentation

Unattended noise logging was conducted in accordance with the NSW EPA guidelines using the noise survey equipment outlined in Table 5-1. The noise loggers and sound level meter were calibrated before and after measurements and found no significant calibration drift.

The calibration certificates for each equipment item can be provided upon request.

Table 5-1 : Noise Logging Equipment

Equipment	Model	Serial Number	Calibration Due
Noise Logger	Svantek SV-977	167936	23/06/2027
Noise Logger	Svantek SV-977A	46000	02/06/2027
Noise Logger	Svantek SV-971A	151459	05/05/2027
Sound Level Meter	Bruel & Kjaer 2270	3010787	29/11/2025
Acoustic Calibrator	Svantek SV-36	167363	23/06/2026

### 5.2. Measurement Location Details

Three measurement locations were selected in accordance with the locations specified in Consent Conditions L3.1 and L3.2 of the latest EPL (dated 1 September 2016). All locations were agreed by HPA and NVAQ prior to the noise survey.

The noise monitoring survey comprised three monitoring locations in accordance with Condition E 1.2. The three locations are marked on the aerial image in Figure 4-2 for reference. Observations and information gathered at each monitoring location ensured that each location was suitable and was representative of the ambient noise environment for the location area.

The three monitoring locations have been established and described below in accordance with the previous noise survey conducted in July 2024.

#### 5.2.1. Location 1: 78 Australia Avenue, Matraville

Unattended and attended noise monitoring was conducted at 78 Australia Avenue, Matraville. The noise logger was installed within the front yard of the residential property facing Australia Avenue. The monitoring location is approximately 1,900 metres from the south boundary of the SICTL site.

Attended noise survey measurements were conducted at the logger location during the Day, Evening & Nighttime periods.

This location is considered the nearest potential affected noise catchment area and was situated with an acceptable distance and separation from adjacent industrial tenancies.

The noise monitoring location was typical of an urban noise environment affected by local traffic, occasional birds and adjacent industrial tenancies between the subject site and the monitoring location. The adjacent industrial tenancies to this site include Opal Recycling facility and Sydney Haulage Container facility.

#### **5.2.2. Location 2: 46 Jennings Street, Matraville**

Unattended and attended noise monitoring was conducted at 46 Jennings Street, Matraville. The noise logger was installed within the front yard of the residential property facing Jennings Street. The monitoring location is approximately 2,200 metres from the south boundary of the SICTL site.

Note: This location has previously been a source of complaints regarding noise emissions from the Hutchison SICTL site and was not part of the original biannual noise compliance monitoring. As part of Conditions L3.1 and L3.2 of the EPL version 13 June 2017.

Attended noise survey measurements were conducted within 5 metres of the logger location on Jennings Street during the Day, Evening & Nighttime periods.

The industrial tenancies located between the site and the monitoring location include are Orora Recycling facility and Sydney Haulage Container facility.

#### **5.2.3. Location 3: 12 Military Road, Matraville**

Unattended and attended noise monitoring was conducted at 12 Military Road, Matraville, located within the Eastern Suburbs Crematorium. The noise logger was installed along the south-eastern fence of the site. The monitoring location is approximately 1,500 metres from the eastern boundary of the SICTL site where containers are loaded on trains.

Attended noise survey measurements were conducted at the logger location during the Day, Evening & Nighttime periods.

The main noise contributions at this location consisted of local traffic and adjacent industrial tenancies, such as DP World container terminal, P&O Trans Australia facility and Warehouse Solution International facility and activity associated with the cemetery are main noise contributors observed as influencing the local ambient noise environment.

### **5.3. Weather & Meteorological Conditions**

All attended noise measurements were conducted during periods with no extraneous weather conditions, characterised by low wind and no rainfall. While the initial part of the week experienced heavy winds and rain, any data collected during those periods was excluded from the analysis in accordance with the provisions of EPA Noise Policy for Industry. Weather data from the Bureau of Meteorology's (BOM) Sydney Airport weather station has been used for this analysis.

## 6. Compliance Noise Monitoring Results

Unattended noise monitoring was conducted for a period of no less than two weeks from 1<sup>st</sup> July to 15<sup>th</sup> July in accordance with Condition E1.2 of the EPL and are summarised in Section 6.1 below.

Attended noise measurements were conducted at each of the three monitoring locations during the Day, Evening and Nighttime assessment periods and are summarised in Section 6.2 below.

General observations of the noise environment in the surrounding area include the following:

- Ambient noise environment characterised by urban hum.
- The dominant noise source at all locations was local and distant traffic.
- Aircraft activities from Sydney Airport were clearly audible at all locations during the day, evening and nighttime periods.
- Noise from adjacent industrial sites were audible at all monitoring locations during the Daytime assessment period, however noise from the port could not be determined and was inaudible during the evening and nighttime assessment periods.
- Birds, residents talking and distant local dogs barking were occasionally heard at each location.
- Trucks, truck breaks, forklifts, reverse beeper sounds could be heard at nearby industrial tenancies during the Daytime assessment periods. This noise is not likely to have been from SICTL due to the distance separation from each of the 3 receiver locations.
- The noise environment at each monitor location was dominated by general traffic, urban and industrial noise sources.
- The ambient noise levels measured at the three logger locations are dominated by local noise sources. This has been confirmed through the attended noise measurement survey and observations during setup and retrieval of equipment.

## 6.1. Unattended Noise Monitoring Results

The results of the unattended noise compliance measurements for each of the three locations are provided in this section below.

### 6.1.1. Location 1: 78 Australia Avenue, Matraville

The results of the unattended noise survey at Location 1: 78 Australia Avenue are provided in Table 6-1 below.

Table 6-1 : 78 Australia Ave - Environmental Noise Survey Results Summary

Date	Day 0700-1800hrs			Evenings 1800-2200hrs			Night 2200-0700hrs		
	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>
1/07/2025	59	67	50	55	65	48	60	62	48
2/07/2025	59	67	50	55	65	48	50	57	44
3/07/2025	54	64	45	51	62	43	46	54	42
4/07/2025	54	64	44	51	62	43	47	56	42
5/07/2025	53	64	39	50	61	38	44	53	39
6/07/2025	54	63	42	55	62	58	53	62	52
7/07/2025	53	62	52	50	59	52	49	53	46
8/07/2025	53	60	43	49	59	51	45	49	45
9/07/2025	58	64	40	54	60	48	54	58	53
10/07/2025	57	62	51	54	61	52	52	56	53
11/07/2025	60	62	50	54	57	52	51	55	48
12/07/2025	54	63	49	52	61	48	50	53	43
13/07/2025	55	61	46	53	59	53	52	55	50
14/07/2025	60	62	49	55	60	48	53	56	50
<b>Median<sup>1</sup></b>	<b>56</b>	<b>62</b>	<b>46</b>	<b>53</b>	<b>61</b>	<b>50</b>	<b>51</b>	<b>55</b>	<b>47</b>

**Note<sup>1</sup>:** The weekly median noise levels do not include the weather excluded days.



## 78 Australia Avenue Notes & Observations:

- The measured  $L_{Aeq}$  noise levels on most days exceeded the  $L_{Aeq}$  noise limit for Australia Avenue. The median  $L_{Aeq}$  noise level also exceeded the  $L_{Aeq}$  noise limit at this location.
- However, based on observations and attended noise measurements the measured  $L_{Aeq}$  noise level exceeded the noise limits due to localised events at or nearby to the residential site.
- The median night-time  $L_{A1}$  noise level of 55 dB(A) complies with the night-time  $L_{A1}$  noise limit of 57 dB(A) for Australia Avenue.
- Furthermore, the unattended noise survey results were found to exceed the EPL Day, Evening and Night-time  $L_{Aeq}$  (15min) noise limit for Australia Avenue.
- It is noted that during attended noise measurements, noise from the direction of Botany Port was just audible at times during the evening, and nighttime at Australia avenue. However, it could not be determined if the source of the noise was from SICTL or adjacent Container Terminals and Industrial premises.
- Therefore, the noise contribution from SICTL was found to be compliant with the EPA license noise limits at Australia Avenue.

### 6.1.2. Location 2: 46 Jennings Street, Matraville

The results of the unattended noise survey at Location 2: 46 Jennings Street are provided in Table 6-1 below.

Table 6-2 : 46 Jennings Street - Environmental Noise Survey Results Summary

Date	Day 0700-1800hrs			Evenings 1800-2200hrs			Night 2200-0700hrs		
	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>
1/07/2025	60	69	52	57	66	50	58	60	47
2/07/2025	58	67	50	54	65	46	50	57	44
3/07/2025	53	64	45	51	62	43	48	54	42
4/07/2025	54	64	44	50	62	41	48	56	43
5/07/2025	53	64	39	49	61	38	45	53	39
6/07/2025	53	63	40	53	63	43	55	65	44
7/07/2025	55	65	44	52	62	44	49	53	44
8/07/2025	57	65	42	52	63	42	47	56	38
9/07/2025	54	64	40	52	64	41	48	56	38
10/07/2025	57	65	47	52	63	44	51	58	43
11/07/2025	54	64	46	52	62	44	46	55	41
12/07/2025	53	64	41	50	62	41	48	56	42
13/07/2025	53	64	39	50	61	41	47	54	40
14/07/2025	57	64	42	52	62	41	48	54	43
<b>Median<sup>1</sup></b>	<b>55</b>	<b>64</b>	<b>42</b>	<b>51</b>	<b>62</b>	<b>42</b>	<b>49</b>	<b>54</b>	<b>42</b>

**Note<sup>1</sup>:** The weekly median noise levels do not include the weather excluded days.

#### 46 Jennings Street Notes & Observations:

- The measured  $L_{Aeq}$  noise levels on most days exceeded the  $L_{Aeq}$  noise limit for Jennings Street. The measured median  $L_{Aeq}$  noise level also exceeded the  $L_{Aeq}$  noise limit at this location.
- However, based on observations and attended noise measurements the measured  $L_{Aeq}$  noise level exceeded the noise limits due to localised noise events at or nearby to the residential site.
- The measured median night-time  $L_{A1}$  noise level of 54 dB(A) complies with the night-time  $L_{A1}$  noise limit of 55 dB(A) for Jennings Street.
- Furthermore, the unattended noise survey results were found to exceed the EPL Day, Evening and Night-time  $L_{Aeq}$  (15min) noise limit for Jennings Street.
- It is noted that during attended noise measurements, noise from the direction of Botany Port was inaudible during the evening, and nighttime at Jennings Street.
- Therefore, the noise contribution from SICTL was found to be compliant with the EPA license noise limits at Jennings Street.

### 6.1.3. Location 3: 12 Military Road, Matraville

The results of the unattended noise survey at Location 3: 12 Military Road, Matraville are provided in Table 6-1 below.

Table 6-3 : 12 Military Road - Environmental Noise Survey Results Summary

Date	Day 0700-1800hrs			Evenings 1800-2200hrs			Night 2200-0700hrs		
	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A90</sub>
1/07/2025	58	65	54	57	64	54	60	63	53
2/07/2025	58	65	54	57	64	54	60	63	53
3/07/2025	65	66	53	55	62	52	65	62	52
4/07/2025	57	64	50	55	62	53	57	62	54
5/07/2025	57	64	51	55	63	52	55	61	51
6/07/2025	58	65	53	57	65	53	59	66	54
7/07/2025	59	66	54	57	65	53	62	63	56
8/07/2025	59	66	56	59	66	56	61	64	56
9/07/2025	58	65	53	59	65	55	61	63	54
10/07/2025	64	68	57	58	66	56	62	64	55
11/07/2025	60	66	56	57	63	54	56	60	52
12/07/2025	56	65	47	53	62	49	55	60	51
13/07/2025	57	65	52	57	65	53	60	63	53
14/07/2025	57	66	51	57	63	54	62	64	54
<b>Median<sup>1</sup></b>	<b>60</b>	<b>65</b>	<b>53</b>	<b>57</b>	<b>64</b>	<b>53</b>	<b>61</b>	<b>63</b>	<b>54</b>

**Note<sup>1</sup>:** The weekly median noise levels do not include the weather excluded days.



## 12 Military Road Notes & Observations:

- The measured  $L_{Aeq}$  noise levels on most days exceeded the  $L_{Aeq}$  noise limit for Military Road. The median  $L_{Aeq}$  noise level also exceeded the  $L_{Aeq}$  noise limit at this location.
- However, based on observations and attended noise measurements the measured  $L_{Aeq}$  noise level exceeded the noise limits due to localised events at or nearby to the cemetery site.
- The measured median night-time  $L_{A1}$  noise level of 63 dB(A) exceeds the night-time  $L_{A1}$  noise limit of 60 dB(A) for Military Road.
- Furthermore, the unattended noise survey results were found to exceed the EPL Day, Evening and Night-time  $L_{Aeq}$  (15min) noise limit for Military Road.
- It is noted that during attended noise measurements, noise from the direction of Botany Port was slightly audible during the evening, and nighttime at Military Road. However, it could not be determined if the source of the noise was from SICTL or adjacent Container Terminals and Industrial premises.
- Therefore, the noise contribution from SICTL was found to be compliant with the EPA license noise limits at Military Road.

## 6.2. Attended Noise Measurement Results

Attended noise measurements were conducted in accordance with the EPL at each of the three monitoring locations during the Day, Evening and Nighttime assessment periods.

In order to measure 'worst-case' operating condition. All attended noise measurements conducted while a ship was being loaded/unloaded at SICTL. Ship loading activities were observed by NVAQ at the Foreshore Road Boat Ramp before and after each set of attended measurements during the Day, Evening and Nighttime. Quay cranes, shuttle carriers, reach stackers and ASCs were observed to be in operation. Furthermore, observations and noise checks were conducted at 'Dent Street' to ensure port noise was not audible at this location.

Results and observations of the attended noise measurements are presented in the sections below.

### 6.2.1. Location 1: 78 Australia Avenue

Table 6-4 below provides the attended noise survey results conducted at 78 Australia avenue during the Day, Evening and Nighttime assessment periods.

Table 6-4: Attended Noise Survey Results – 78 Australia Avenue

Period	Date / Start Time (15min)	Measured Noise Levels - 15min			Comments
		L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	
Day	07/07/2025 13:00	47	56	68	<ul style="list-style-type: none"> <li>- The noise environment was dominated by local traffic along Australia Ave.</li> <li>- Typical urban residential hum with some distant industrial noise present from nearby sites including Opal recycling plant.</li> <li>- Aircraft activity clearly audible</li> <li>- Low level audible industrial noise from port direction. Could not be determined to be coming from SICTL</li> </ul>
Evening	07/07/2025 20:36	49	58	67	<ul style="list-style-type: none"> <li>- The noise environment was dominated by intermittent local traffic along Aus Ave. General urban hum noise including birds and people talking while walking.</li> <li>- Distant road traffic noise from Beauchamp Rd, Bunnerong Rd and Botany Rd.</li> <li>- Aircraft activity clearly audible</li> <li>- No audible industrial noise from port</li> </ul>
Night	07/07/2025 22:59	46	51	57	<ul style="list-style-type: none"> <li>- The noise environment was dominated by intermittent local traffic along Aus Ave.</li> <li>- Aircraft activity clearly audible</li> <li>- No audible industrial noise from port</li> </ul>

#### Notes & Compliance:

- The attended measured noise levels were found to exceed the noise criteria for Australia Avenue during the Day, Evening and Nighttime assessment periods.
- Noise from the port was inaudible at this location and therefore the noise contribution from SICTL was found to be compliant with the noise limits on Australia Avenue.

### 6.2.2. Location 2: 46 Jennings Street

Table 6-4 below provides the attended noise survey results conducted at 46 Jennings Street during the Day, Evening and Nighttime assessment periods.

Table 6-5: Attended Noise Survey Results – 46 Jennings Street

Period	Date / Start Time (15min)	Measured Noise Levels			Comments
		L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	
Day	07/07/2025 13:22	44	57	72	<ul style="list-style-type: none"> <li>- The noise environment was dominated by local traffic along Jennings Street.</li> <li>- Typical urban residential hum with constant distant traffic noise from Beauchamp Rd, Bunnerong Rd and Perry Street.</li> <li>- Aircraft take-off and landing movements clearly audible</li> <li>- Distant industrial noise occasionally audible.</li> <li>- No audible industrial noise from port</li> </ul>
Evening	07/07/2025 20:11	41	56	69	<ul style="list-style-type: none"> <li>- The noise environment was dominated by local traffic along Jennings Street.</li> <li>- Typical urban residential hum, birds and distant traffic noise from Beauchamp Rd, Bunnerong Rd and Perry Street.</li> <li>- Aircraft activity clearly audible</li> <li>- Distant industrial noise occasionally audible, not from port direction.</li> <li>- No audible industrial noise from port</li> </ul>
Night	07/07/2025 22:32	45	52	62	<ul style="list-style-type: none"> <li>- The noise environment was dominated by intermittent local traffic along Aus Ave.</li> <li>- Aircraft activity from airport clearly audible. Several aircraft taking off and landing.</li> <li>- No audible industrial noise from port</li> </ul>

#### Notes & Compliance:

- The attended measured noise levels were found to exceed the noise criteria for Australia Avenue during the Day, Evening and Nighttime assessment periods.
- Noise from the port was inaudible at this location and therefore the noise contribution from SICTL was found to be compliant with the noise limits on Jennings Street.

### 6.2.3. Location 3: 12 Military Road

Table 6-4 below provides the attended noise survey results conducted at 12 Military Road avenue during the Day, Evening and Nighttime assessment periods.

Table 6-6: Attended Noise Survey Results – 12 Military Road

Period	Date / Start Time (15min)	Measured Noise Levels			Comments
		L <sub>A90</sub>	L <sub>Aeq</sub>	L <sub>A1</sub>	
Day	07/07/2025 13:53	52	66	78	<ul style="list-style-type: none"> <li>- The noise environment was dominated by local traffic along Military Road.</li> <li>- Typical urban residential hum with distant traffic noise from Bumborah Point Rd &amp; Botany Rd.</li> <li>- Aircraft activity clearly audible throughout.</li> <li>- Distant industrial noise occasionally audible</li> <li>- Clearly audible industrial noise from port and nearby industrial sites, likely to be shipping companies and DP world. Noise included 'banging' noises from containers being moved or dropped in the direction of DP world.</li> </ul>
Evening	07/07/2025 21:05	47	65	76	<ul style="list-style-type: none"> <li>- The noise environment was dominated by local traffic along Military Road.</li> <li>- Typical urban residential hum with distant traffic noise from Bumborah Point Rd &amp; Botany Rd.</li> <li>- Aircraft activity clearly audible</li> <li>- Distant industrial noise occasionally audible, possibly from DP world or adjacent industrial sites. Noise from dropping shipping containers from the directions of DP world.</li> <li>- No audible industrial noise from SICTL port</li> </ul>
Night	07/07/2025 22:05	44	51	60	<ul style="list-style-type: none"> <li>- The noise environment was dominated by intermittent local traffic along Aus Ave.</li> <li>- Aircraft activity clearly audible</li> <li>- No audible industrial noise from port</li> </ul>

#### Notes & Compliance:

- The attended measured noise levels were found to exceed the noise criteria for Australia Avenue during the Day, Evening and Nighttime assessment periods.

Noise from the SICTL port was inaudible at this location and therefore the noise contribution from SICTL was found to be compliant with the noise limits on Military Road.



## 7. Statement of Industrial Noise Compliance

In order to provide a statement of compliance for the existing industrial noise from SICTL, the unattended and attended noise monitoring results have been analysed and reviewed in detail. Noise emissions and noise contribution originating from the SICTL site were assessed during times where there was minimal localised noise and low ambient noise levels at the monitoring locations.

At each of the three noise monitoring locations there were multiple noise sources contributing to the ambient noise environment. As it is not possible to filter out all the localised ambient noise sources, compliance has been determined based on observations, attended measurements and statistical noise measurements.

### 7.1. Operations

NVAQ understands that normal operations were conducted at SICTL during the two-week monitoring period between 1 July to 15 July 2025. The SICTL shipping schedule was provided to NVAQ before the two-week monitoring period to confirm the presence of 'normal' operations with several ships being loaded/unloaded. The shipping schedules have been reproduced in Appendix E for reference and show that ships were loaded/unloaded on 8 separate occasions.

Furthermore, NVAQ staff observed container ships being loaded/unloaded at several occasions during the two-week period, particularly during the attended noise surveys. This was observed from the Foreshore Road Boat Ramp which is located adjacent to the SICTL site.

### 7.2. Measured Noise Levels Review

#### 7.2.1. Daytime Period

Unattended and attended noise levels measured at Australia Avenue, Jennings Street and Military Road all show an exceedance of the EPL Daytime  $L_{Aeq}$  noise limits.

The ambient noise environment at all 3 locations was dominated by localised noise, traffic noise and aircraft noise.

During the attended noise surveys, operational noise emissions from Port Botany shipping facilities was audible at low levels at Military Road and Australia Avenue. However, NVAQ could not determine that the noise source was coming from the direction of SICTL. Noise from the Port was inaudible at Jennings Street.

Therefore, based on the noise survey results and observations, operational noise impacts from SICTL are considered to be compliant with the EPL Daytime noise limits.

#### 7.2.2. Evening time Period

Unattended and attended noise levels measured at Australia Avenue, Jennings Street and Military Road all show an exceedance of the EPL Evening time period  $L_{Aeq}$  noise limits.

The ambient noise environment at all 3 locations was dominated by localised noise, distant industrial noise birds, insects, traffic noise and aircraft noise.

During the attended noise surveys, operational noise emissions from Port Botany shipping facilities was audible at low levels at Military Road and Australia Avenue. However, NVAQ could not determine that the noise source was coming from the direction of SICTL and was likely to be from DP World and adjacent industrial tenancies. Noise from the Port was inaudible at Jennings Street during the Evening.

Therefore, based on the noise survey results and observations, operational noise impacts from SICTL are considered to be compliant with the EPL Evening time noise limits.

### 7.2.3. Nighttime Period

Unattended and attended noise levels measured at Australia Avenue, Jennings Street and Military Road all show an exceedance of the EPL Nighttime  $L_{Aeq}$  noise limits.

The ambient noise environment at all 3 locations was dominated by localised noise, distant traffic noise and occasional aircraft noise.

During the attended noise surveys, operational noise emissions from Port Botany shipping facilities was inaudible at all 3 monitoring locations at Military Road, Australia Avenue & Jennings Street.

Therefore, based on the noise survey results and observations, operational noise impacts from SICTL are considered to be compliant with the EPL Nighttime noise limits.

## 8. Conclusion & Summary

To satisfy the requirements of the EPL for operations at SICTL, NVAQ conducted attended and unattended noise monitoring at the following 3 locations in accordance with the EPA License:

- 78 Australia Avenue
- 46 Jennings Street
- 12 Military Road

The short-term attended and long-term unattended measured noise levels were assessed against the EPL noise limits to determine compliance.

Existing noise levels at all 3 receiver locations are considered as 'high noise' areas. The dominant noise sources contributing to the  $L_{Aeq}$  and  $L_1$  noise measurements at all 3 locations was localised traffic, general urban hum, adjacent industrial sites, aircraft activities.

NVAQ note that low noise levels were observed from the Port Botany shipping facilities area at Australia Street and Military Road, however the direction and location of the port noise could not be determined in any instance. Port noise was found to be inaudible at Jennings Street during all survey periods.

Based on the attended measurements and observations, SICTL operational noise was found to be compliant with the EPL Day, Evening and Night-time noise limits.

Furthermore, no continuous annoying characteristics or tonal noise was present at the residential receivers. The port noise was found to be inaudible during the Nighttime periods and therefore will not cause sleep disturbance.

Based on the current operations, the site is found to be compliant with the operational noise limits. However, if SICTL increase or change their current operations, noise management procedures should be implemented to ensure the noise levels remain compliant.

## Appendix A Terminology

### **Decibel, dB:**

Unit of acoustic measurement. Measurements of power, pressure and intensity. Expressed in dB relative to standard reference levels.

### **dB(A):**

Unit of acoustic measurement weighted to approximate the sensitivity of human hearing to sound frequency.

### **Sound Pressure Level, $L_p$ (dB), of a sound:**

20 times the logarithm to the base 10 of the ratio of the r.m.s. sound pressure to the reference sound pressure of 20 micro Pascals. Sound pressure level is measured using a microphone and a sound level meter, and varies with distance from the source and the environment.

### **Ambient Sound:**

Of an environment: the all-encompassing sound associated with that environment, being a composite of sounds from many sources, near and far.

### **Percentile Level – $L_{90}$ , $L_{50}$ , $L_{10}$ , $L_1$ etc:**

A statistical measurement giving the sound pressure level which is exceeded for the given percentile of an observation period, e.g.  $L_{90}$  is the level which is exceeded for 90% of a measurement period.  $L_{90}$  is commonly referred to as the "background" sound level.

### **$L_{Aeq,T}$ :**

Equivalent continuous A-weighted sound pressure level. The value of the A-weighted sound pressure level of a continuous steady sound that, within a measurement time interval T, has the same A-weighted sound energy as the actual time-varying sound.

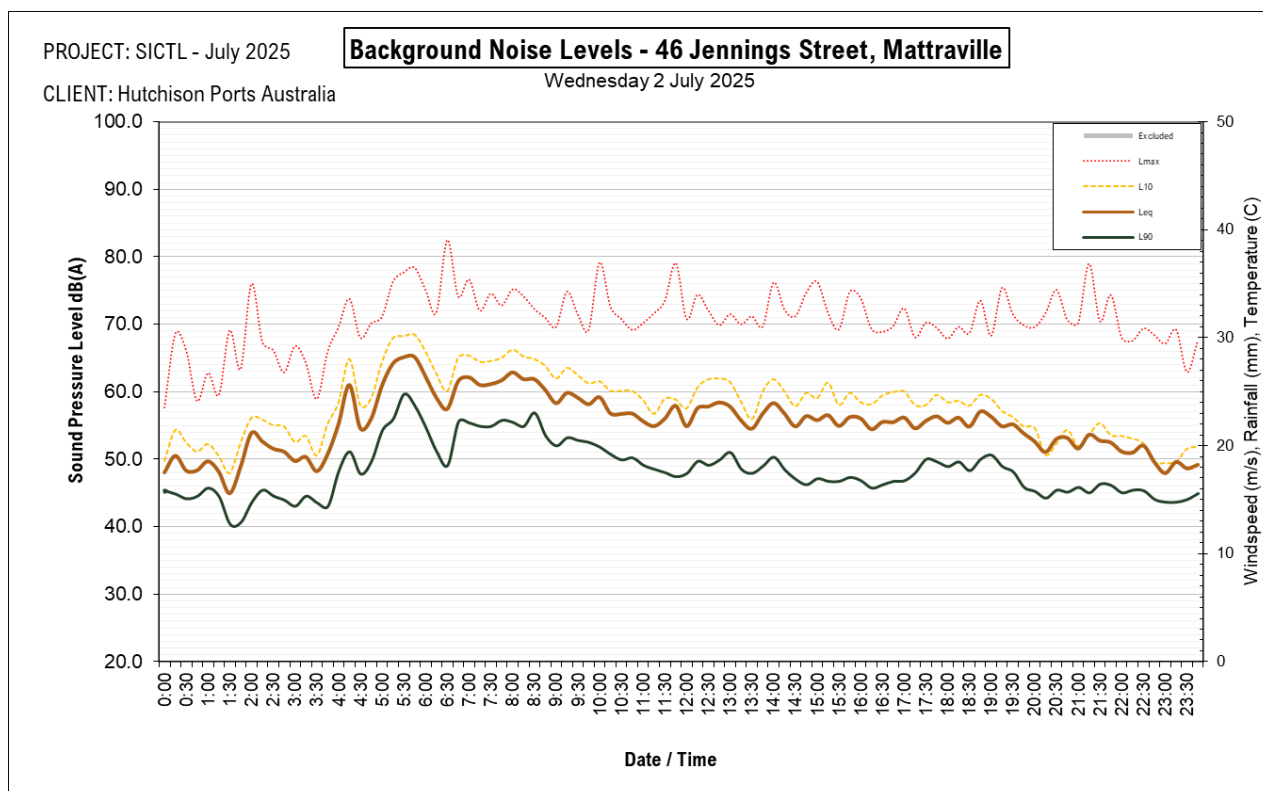
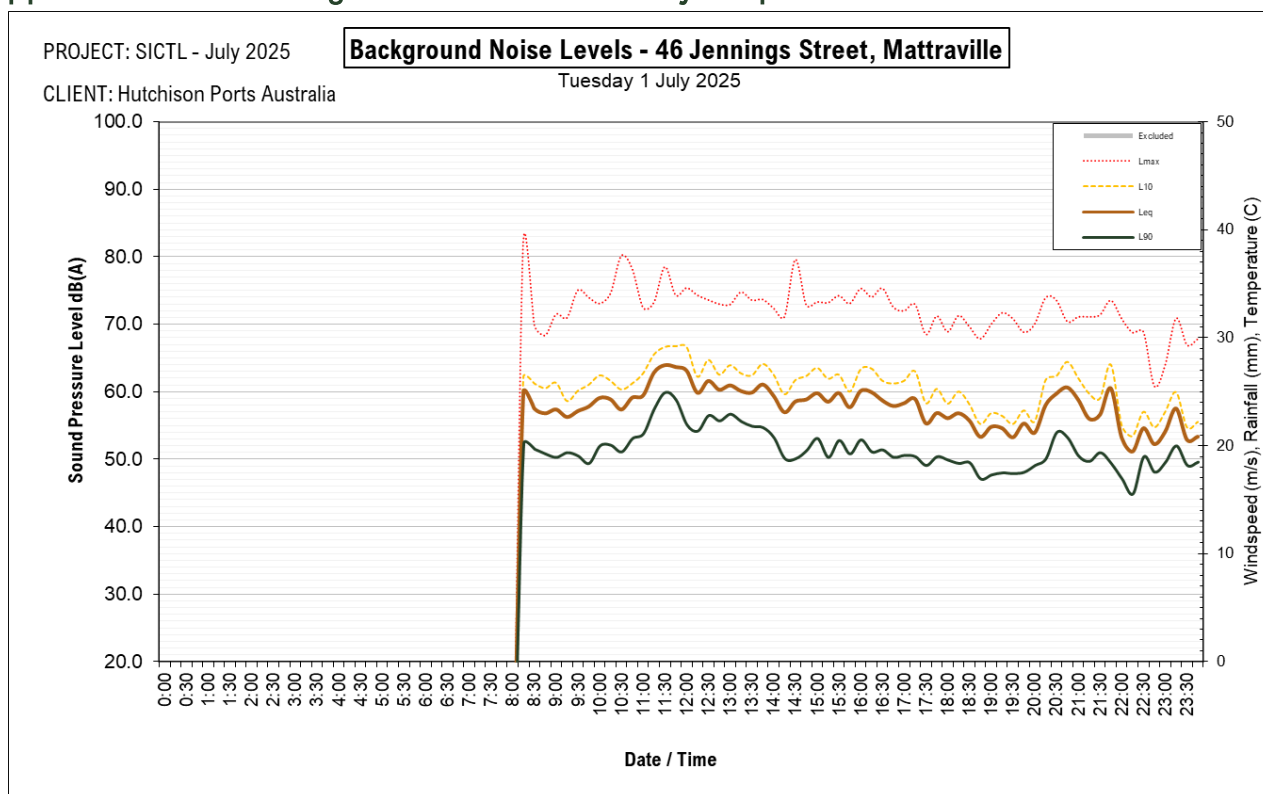
### **$L_{max}$ :**

The maximum noise level over the measurement period for a given time weighting e.g. slow (s), fast (F) or impulse (I).

### **Rating Background Level – RBL:**

Method for determining the existing background noise level which involves calculating the tenth percentile from the  $L_{A90}$  measurements. This value gives the Assessment Background Noise Level (ABL). Rating Background Level is the median of the overall ABL.

## Appendix B 46 Jennings Street - Noise Survey Graphs



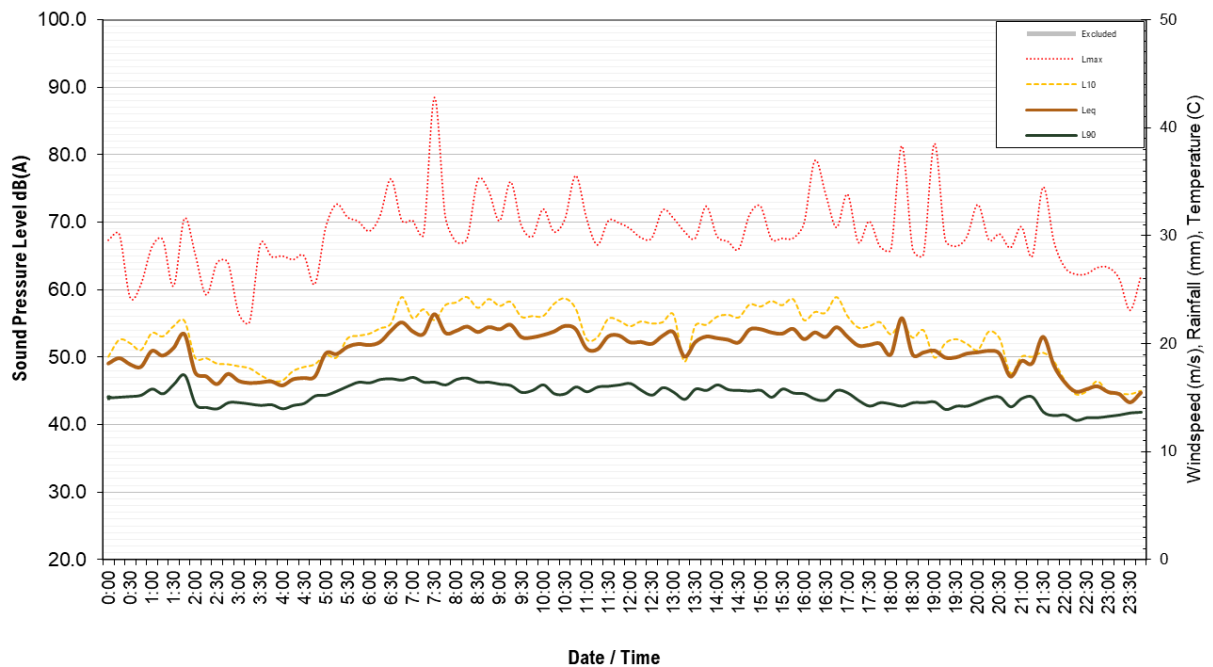


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Mattraville

CLIENT: Hutchison Ports Australia

Thursday 3 July 2025

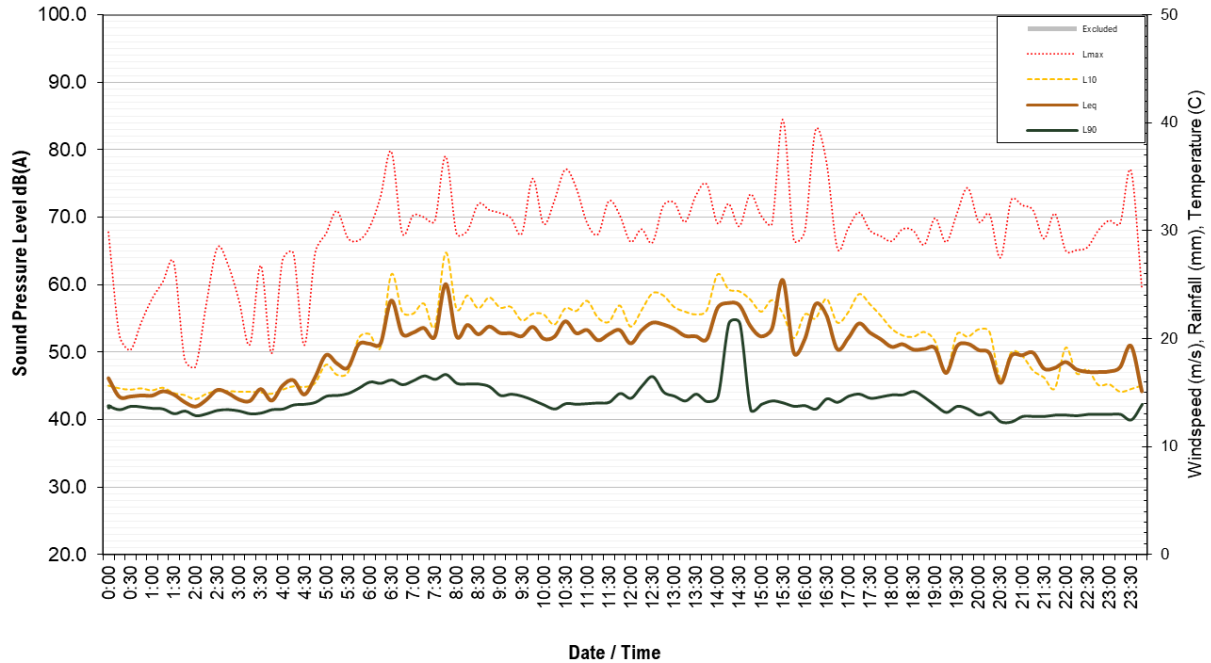


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Mattraville

CLIENT: Hutchison Ports Australia

Friday 4 July 2025

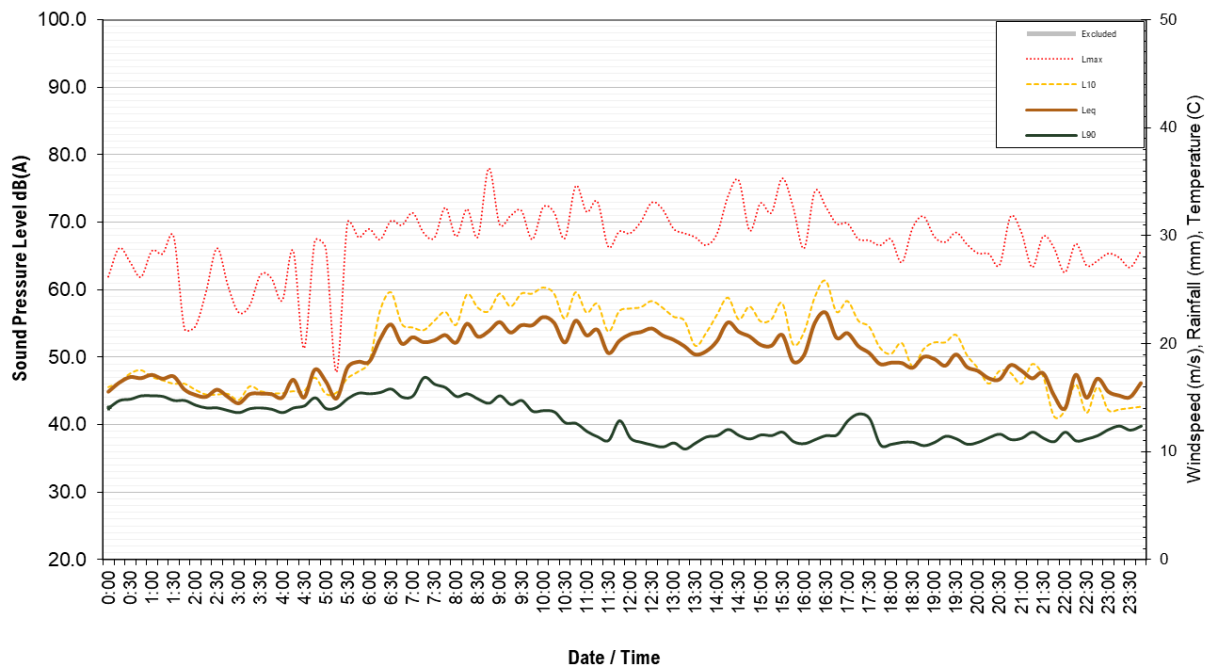


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Matraville

CLIENT: Hutchison Ports Australia

Saturday 5 July 2025



PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Matraville

CLIENT: Hutchison Ports Australia

Sunday 6 July 2025

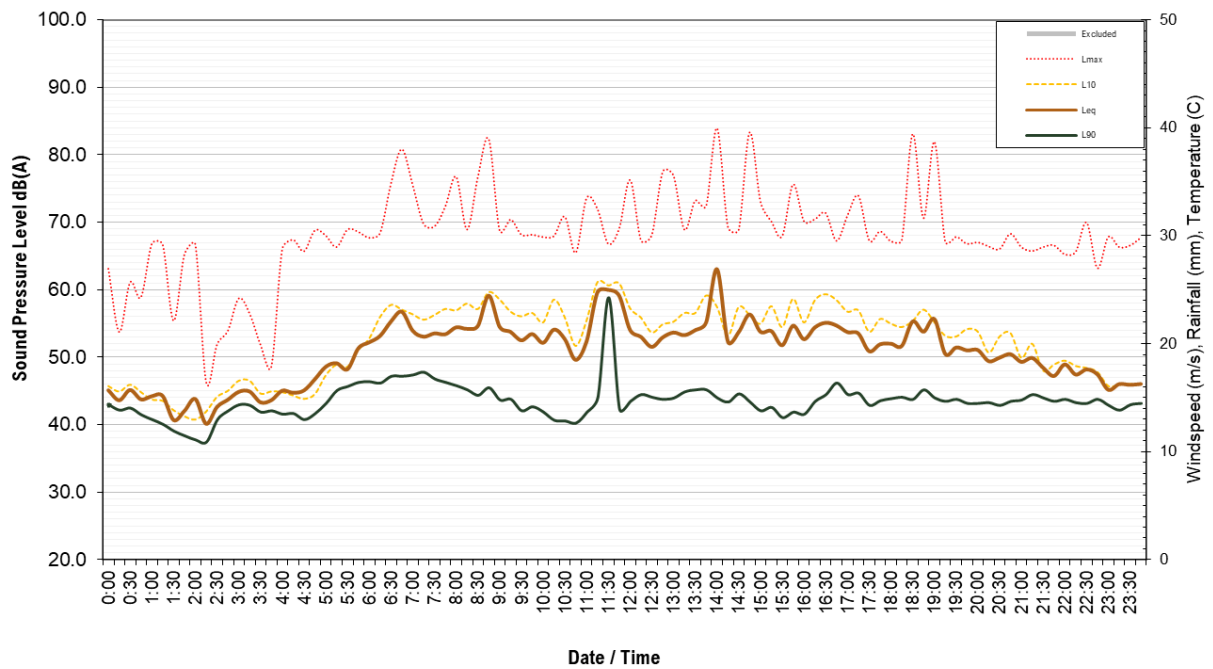


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Mattraville

CLIENT: Hutchison Ports Australia

Monday 7 July 2025

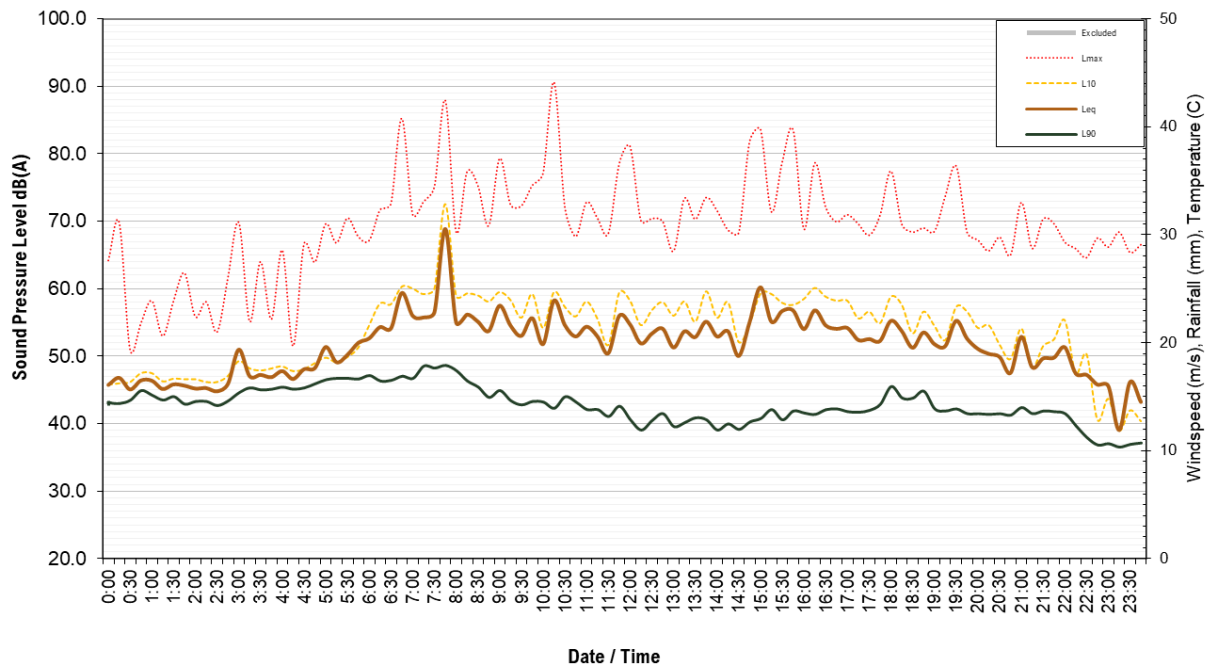


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Mattraville

CLIENT: Hutchison Ports Australia

Tuesday 8 July 2025

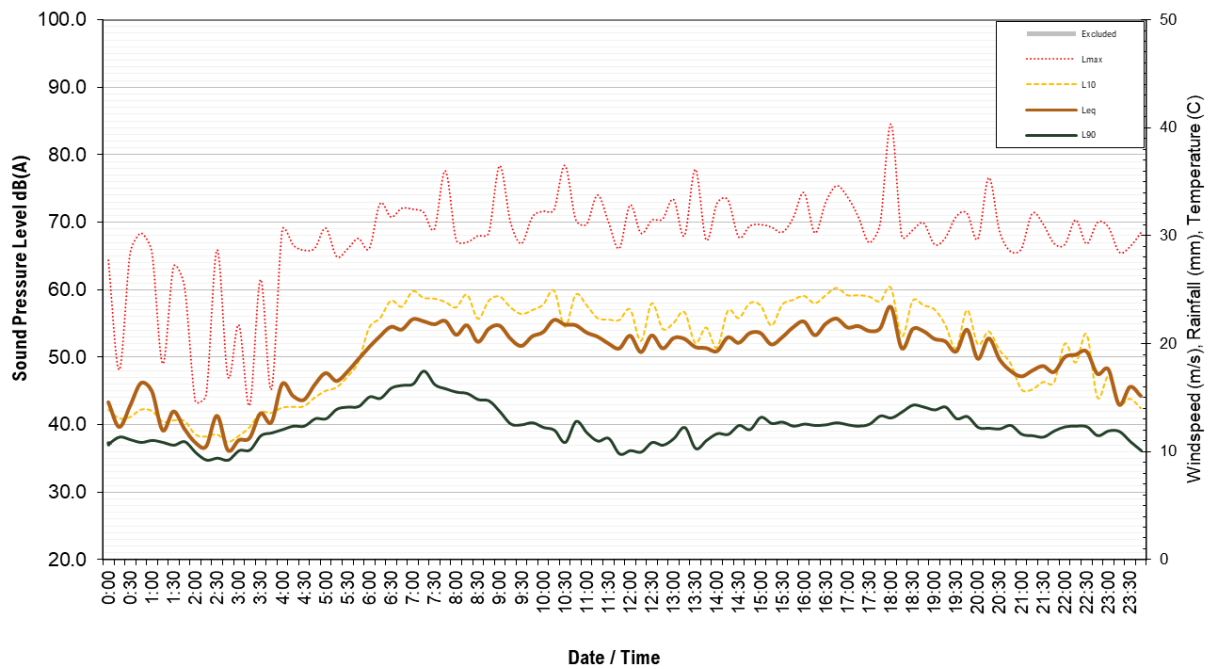


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Matraville

CLIENT: Hutchison Ports Australia

Wednesday 9 July 2025

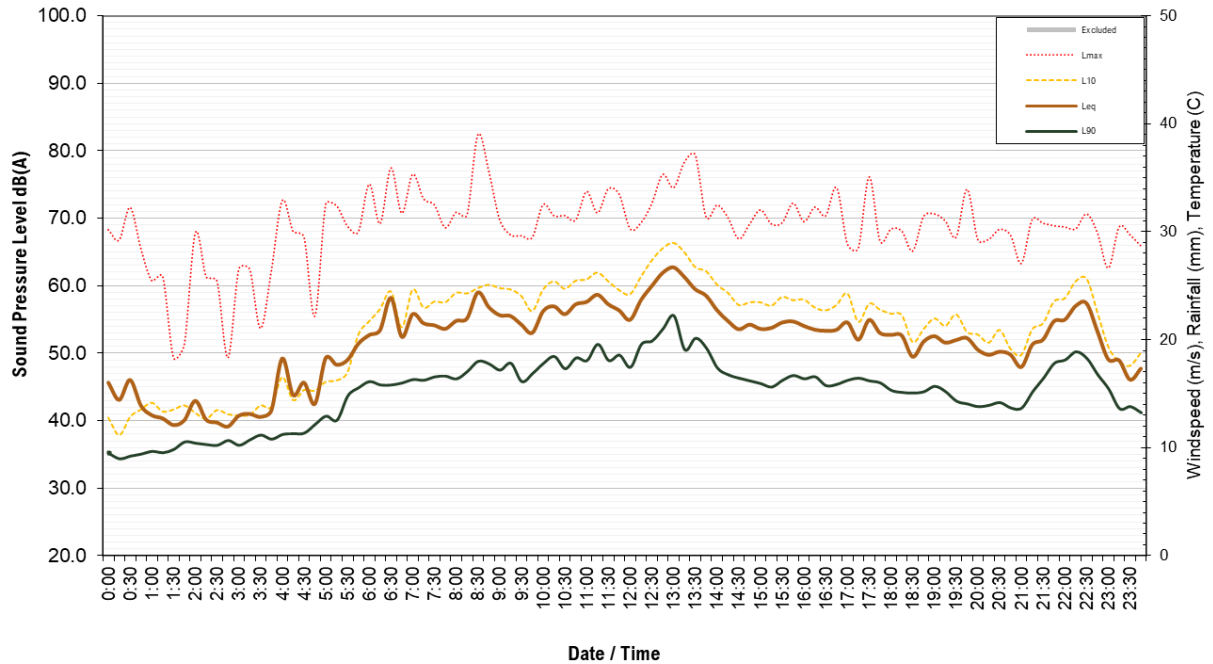


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Matraville

CLIENT: Hutchison Ports Australia

Thursday 10 July 2025

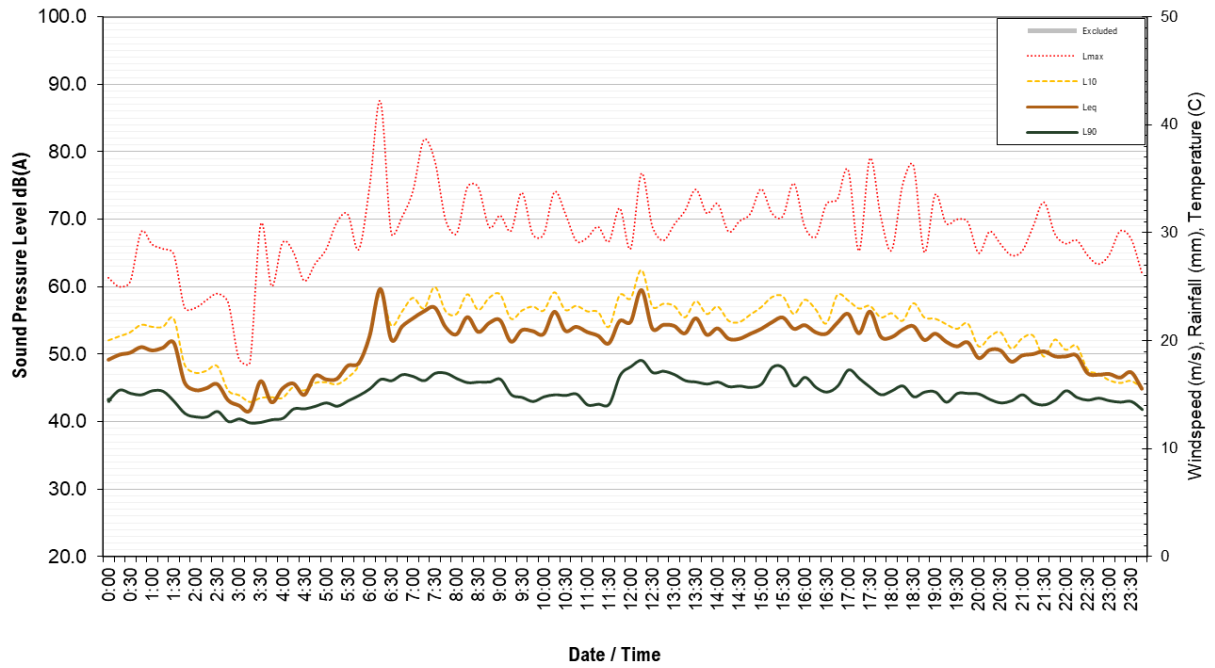


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Mattraville

CLIENT: Hutchison Ports Australia

Friday 11 July 2025

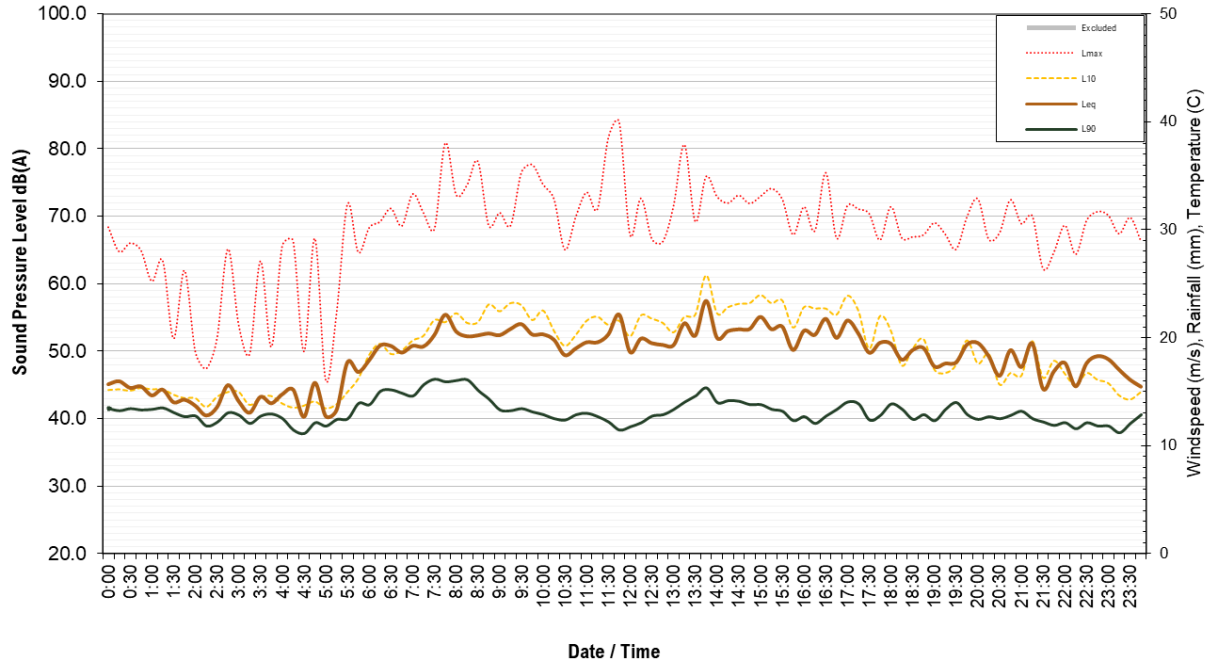


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Mattraville

CLIENT: Hutchison Ports Australia

Saturday 12 July 2025

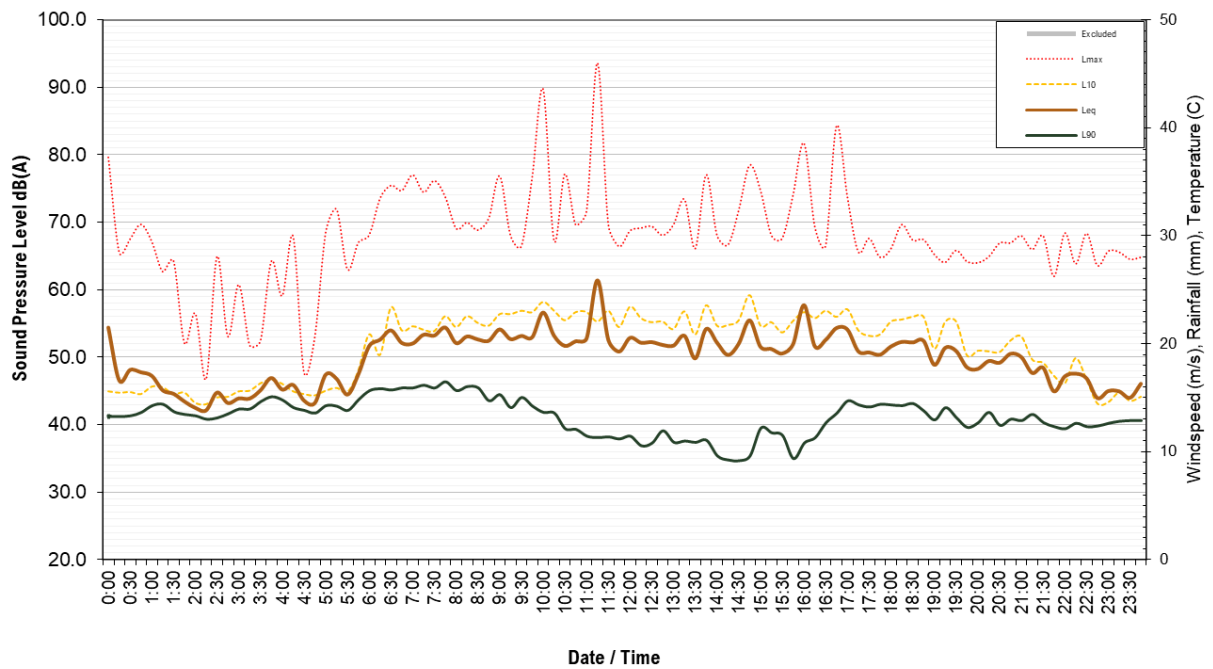


PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Matraville

CLIENT: Hutchison Ports Australia

Sunday 13 July 2025



PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Matraville

CLIENT: Hutchison Ports Australia

Monday 14 July 2025



PROJECT: SICTL - July 2025

### Background Noise Levels - 46 Jennings Street, Mattraville

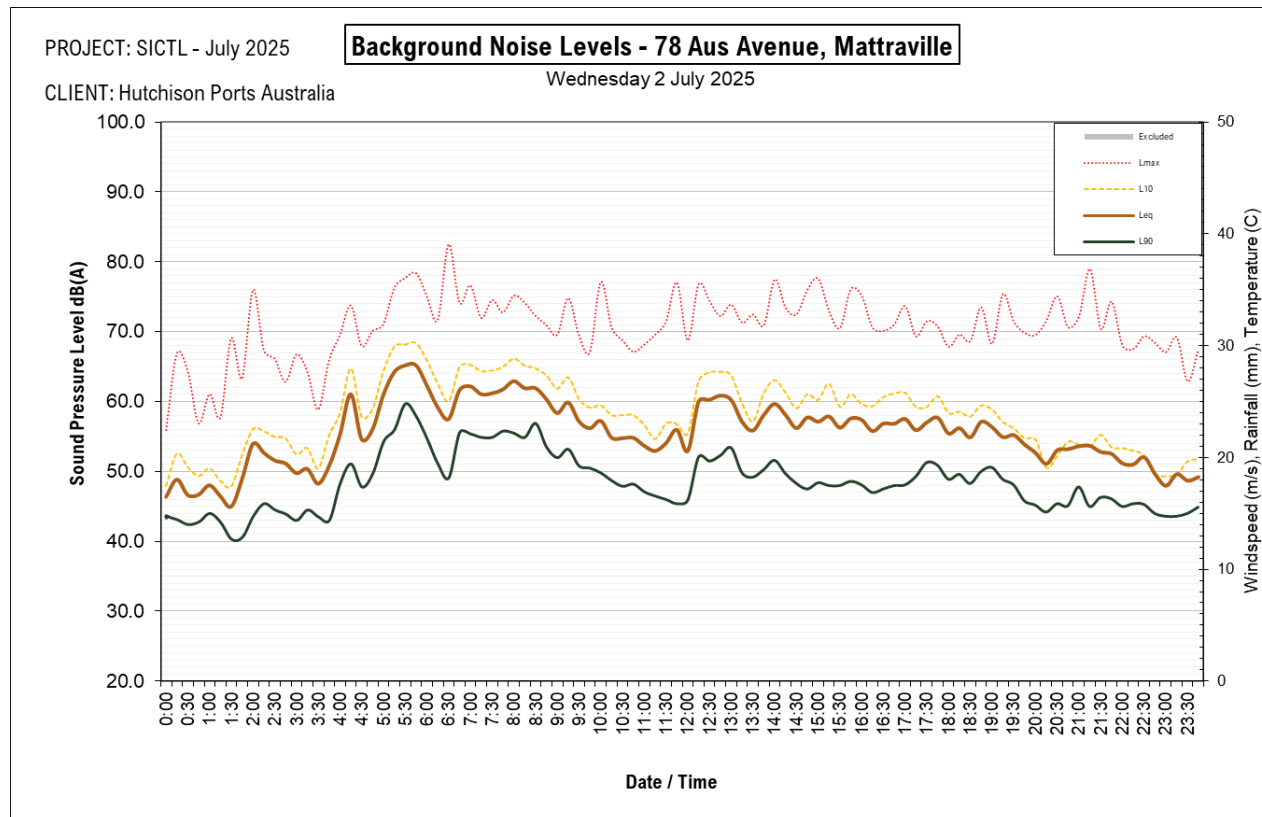
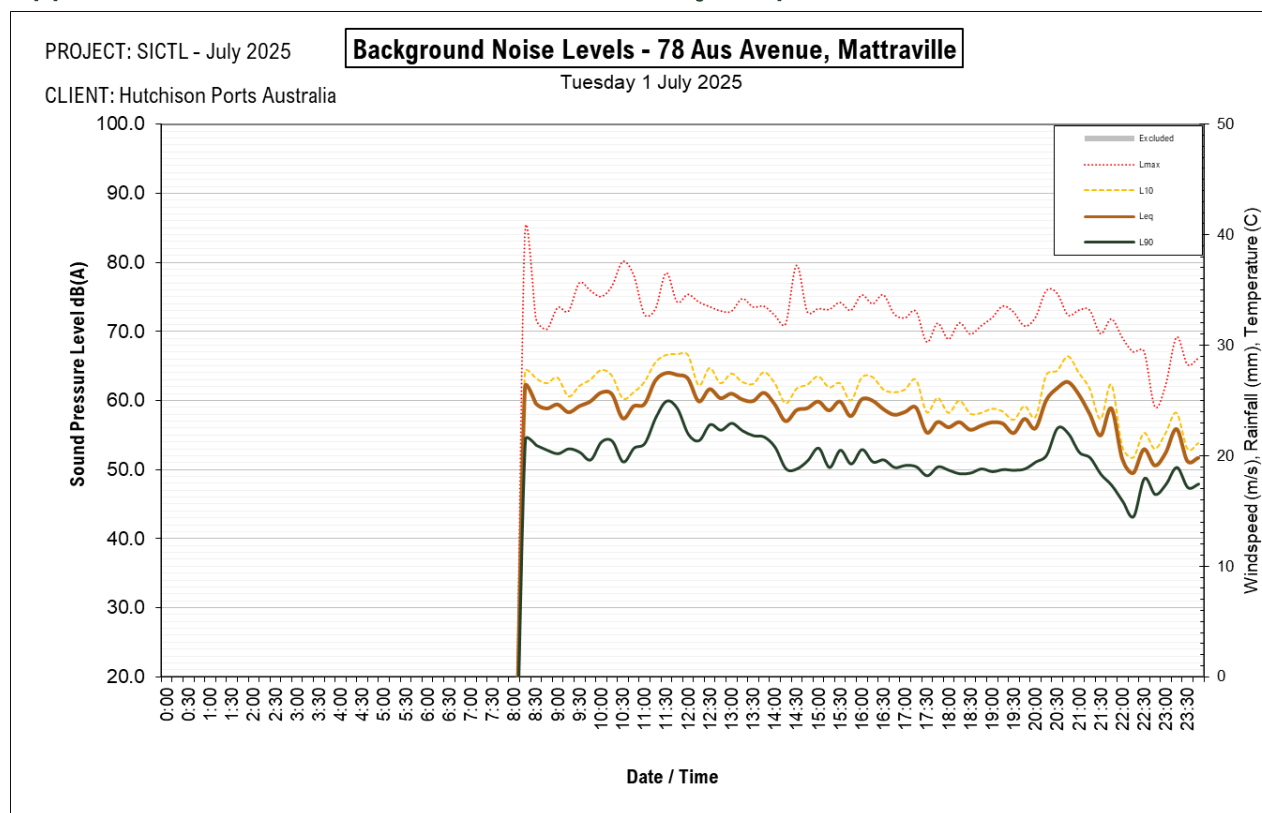
CLIENT: Hutchison Ports Australia

Tuesday 15 July 2025





## Appendix C 78 Australia Avenue Noise Survey Graphs

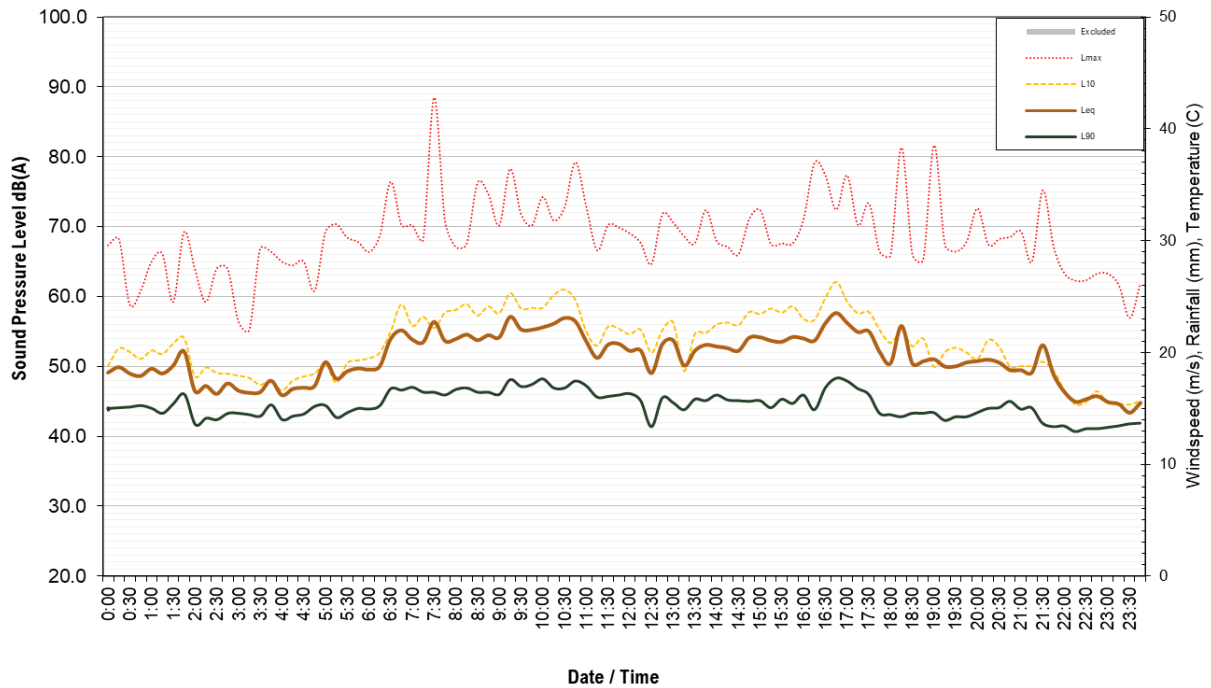


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Matraville

CLIENT: Hutchison Ports Australia

Thursday 3 July 2025

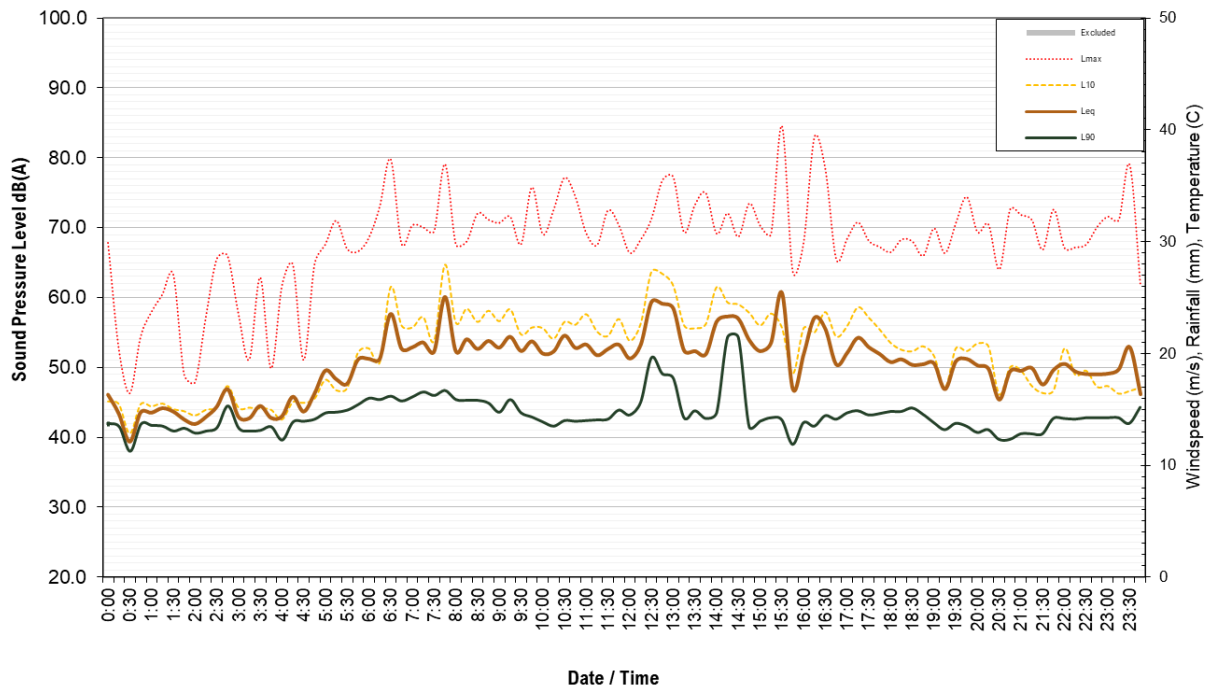


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Matraville

CLIENT: Hutchison Ports Australia

Friday 4 July 2025



PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Matraville

CLIENT: Hutchison Ports Australia

Saturday 5 July 2025

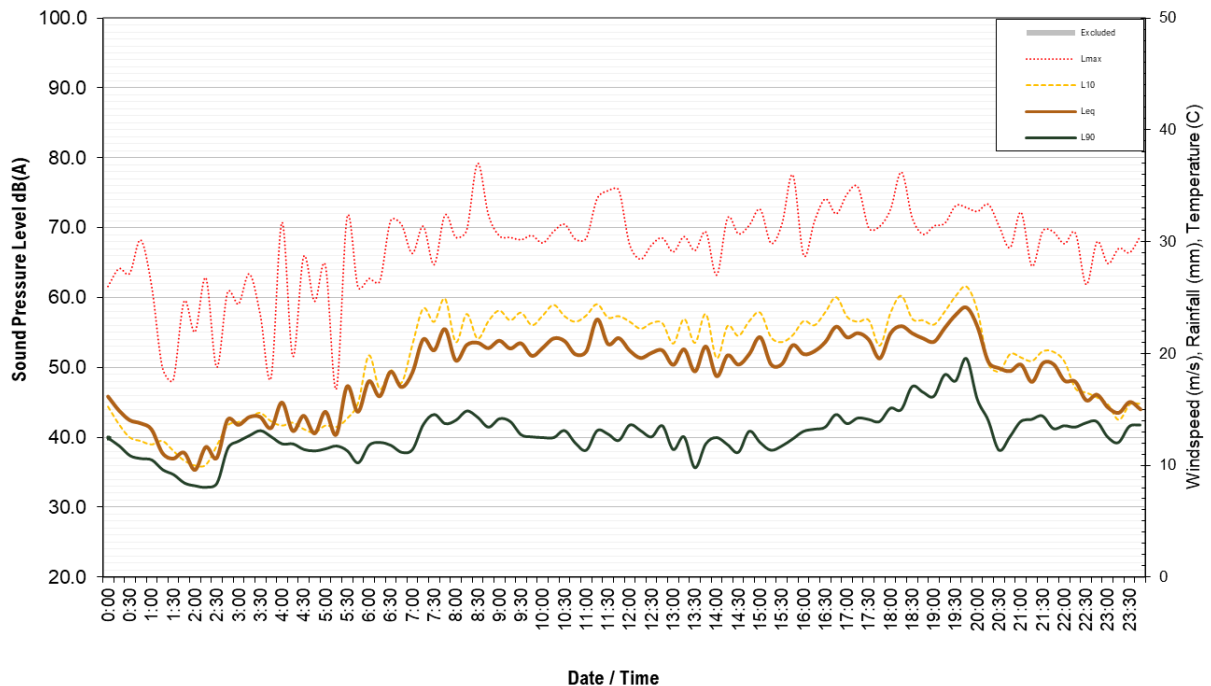


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Matraville

CLIENT: Hutchison Ports Australia

Sunday 6 July 2025

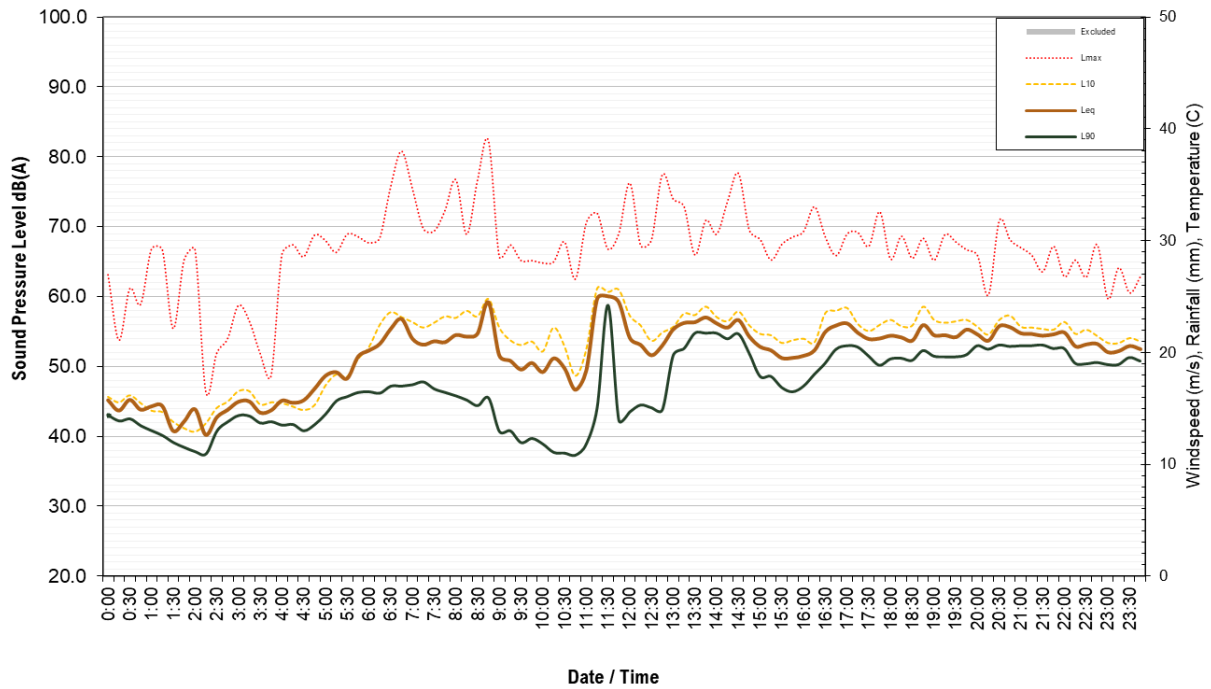


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Matraville

CLIENT: Hutchison Ports Australia

Monday 7 July 2025

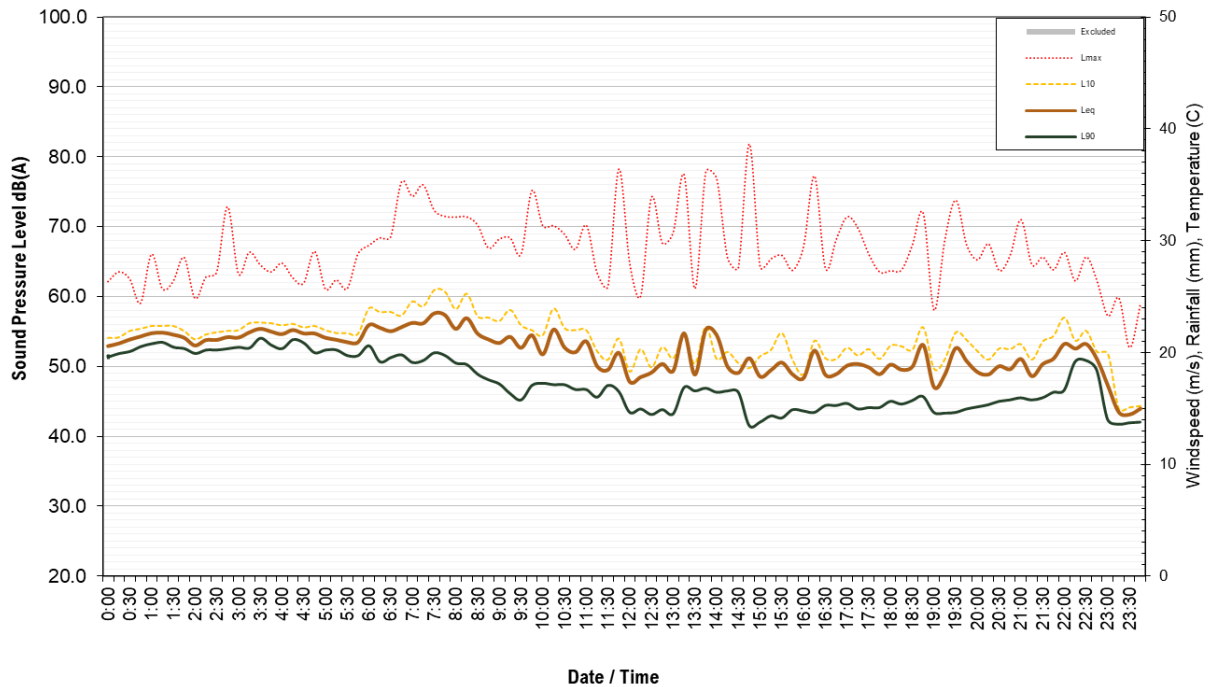


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Matraville

CLIENT: Hutchison Ports Australia

Tuesday 8 July 2025

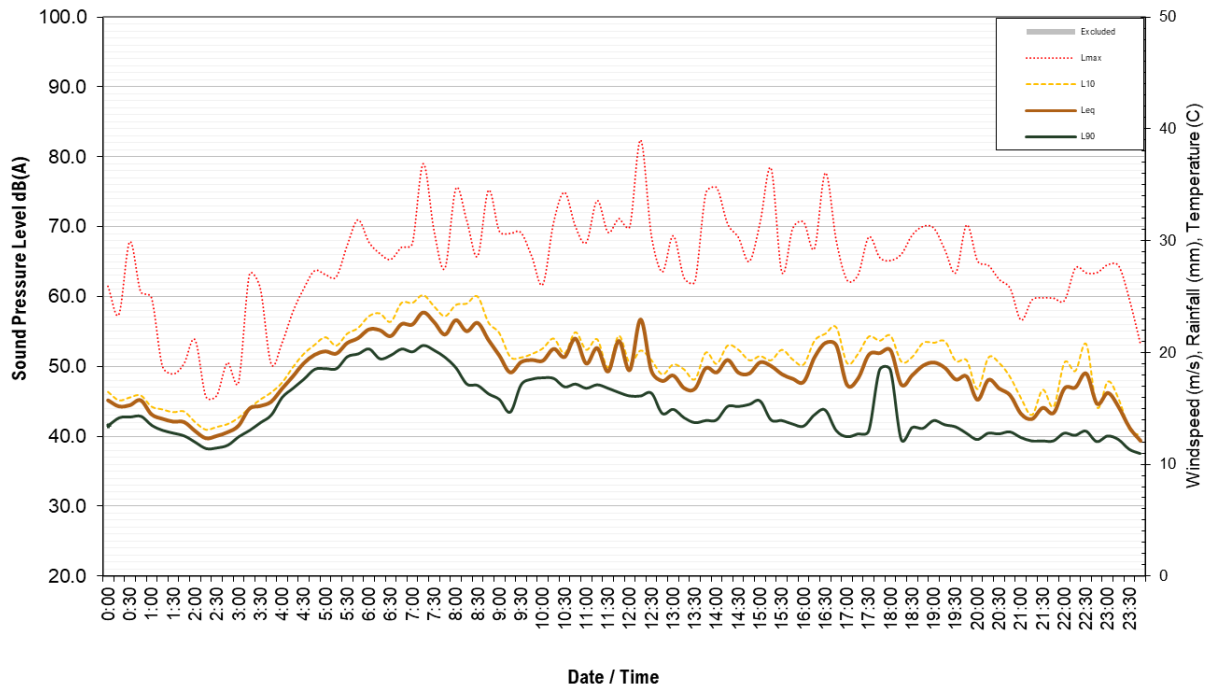


PROJECT: SICTL - July 2025

**Background Noise Levels - 78 Aus Avenue, Matraville**

CLIENT: Hutchison Ports Australia

Wednesday 9 July 2025

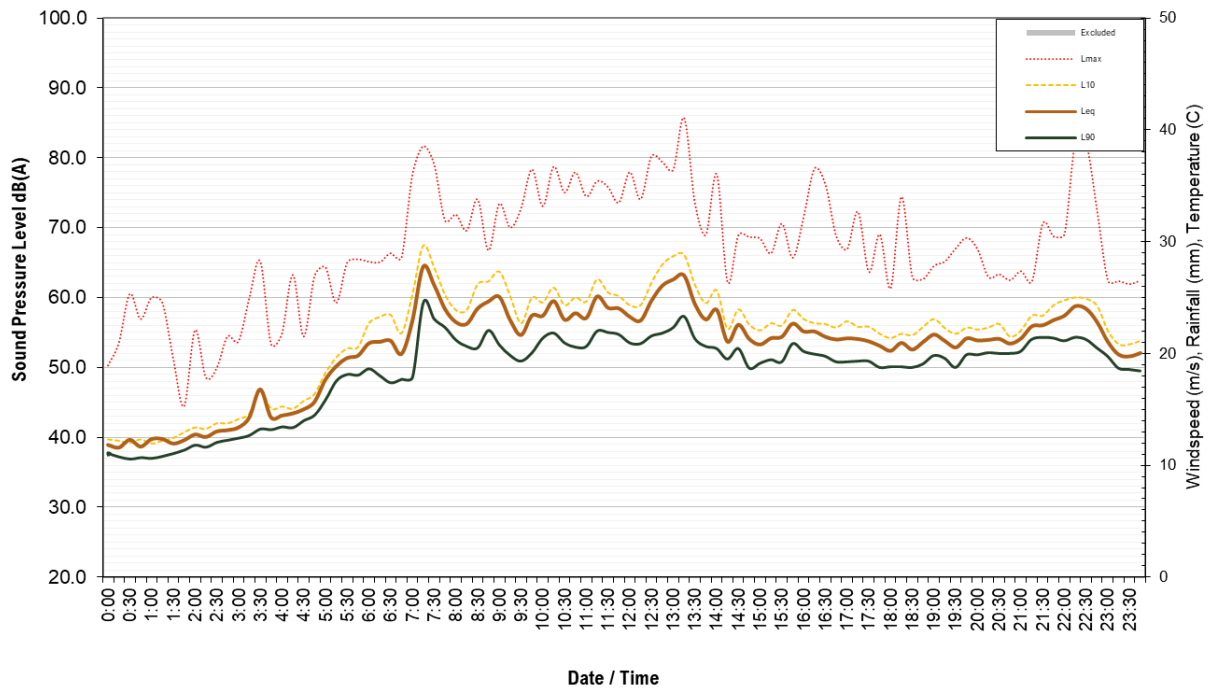


PROJECT: SICTL - July 2025

**Background Noise Levels - 78 Aus Avenue, Matraville**

CLIENT: Hutchison Ports Australia

Thursday 10 July 2025

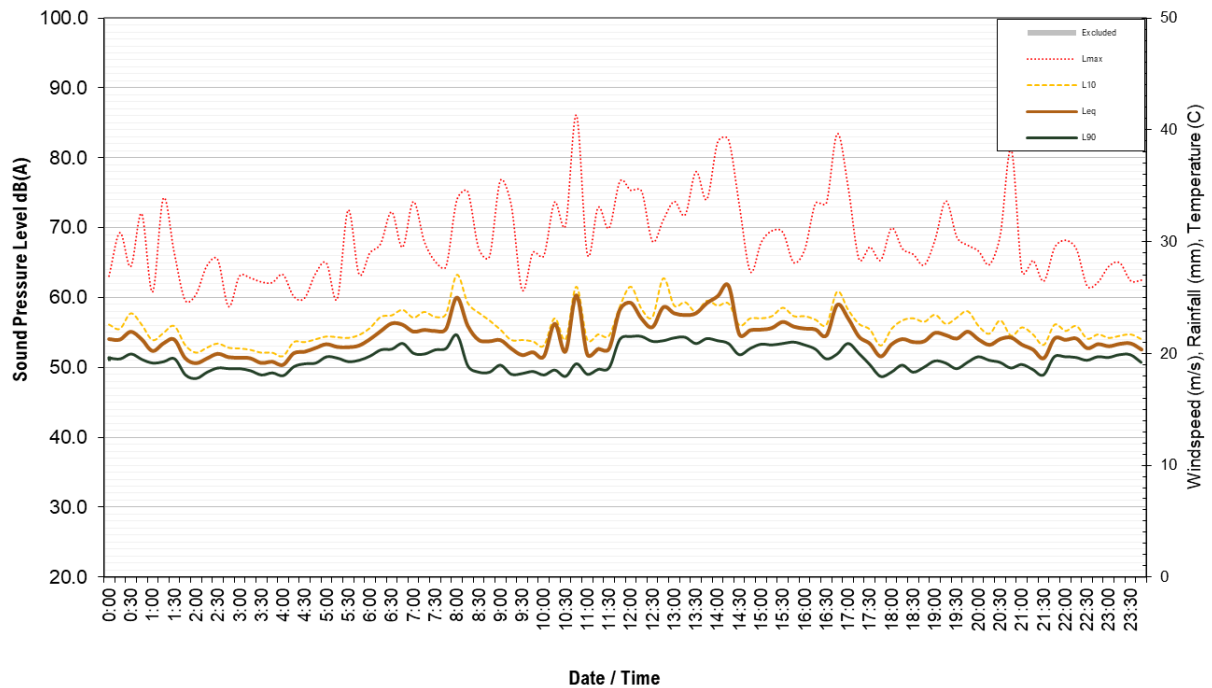


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Mattraville

CLIENT: Hutchison Ports Australia

Friday 11 July 2025

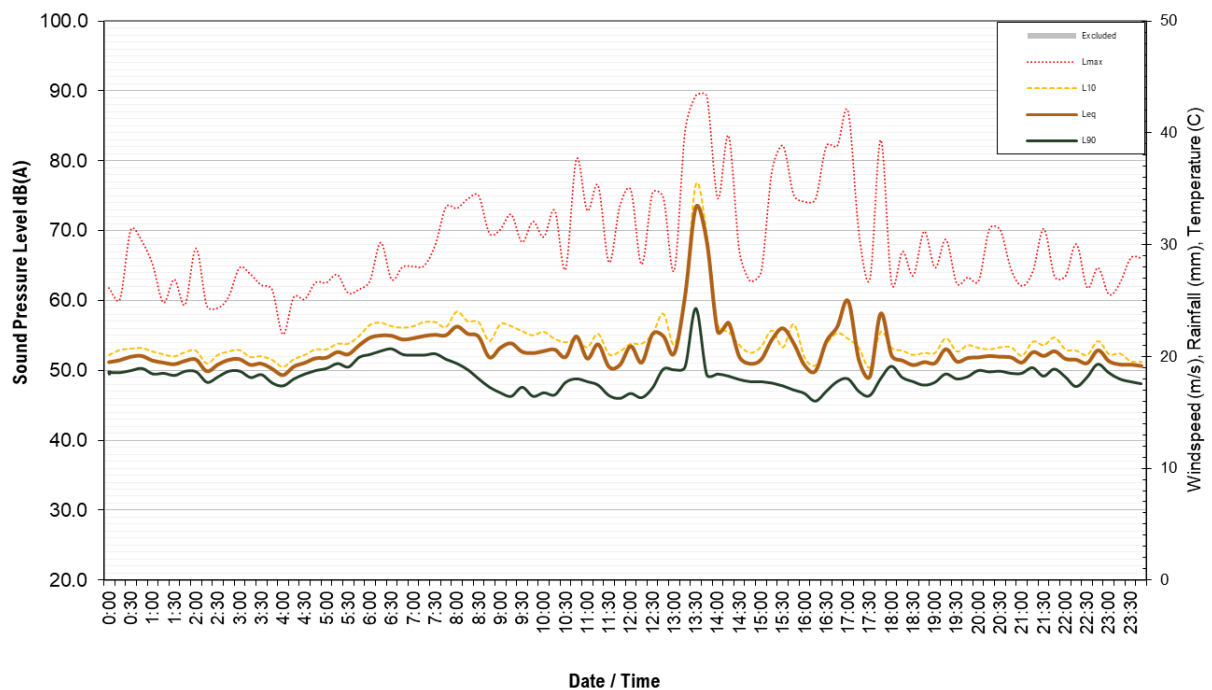


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Mattraville

CLIENT: Hutchison Ports Australia

Saturday 12 July 2025

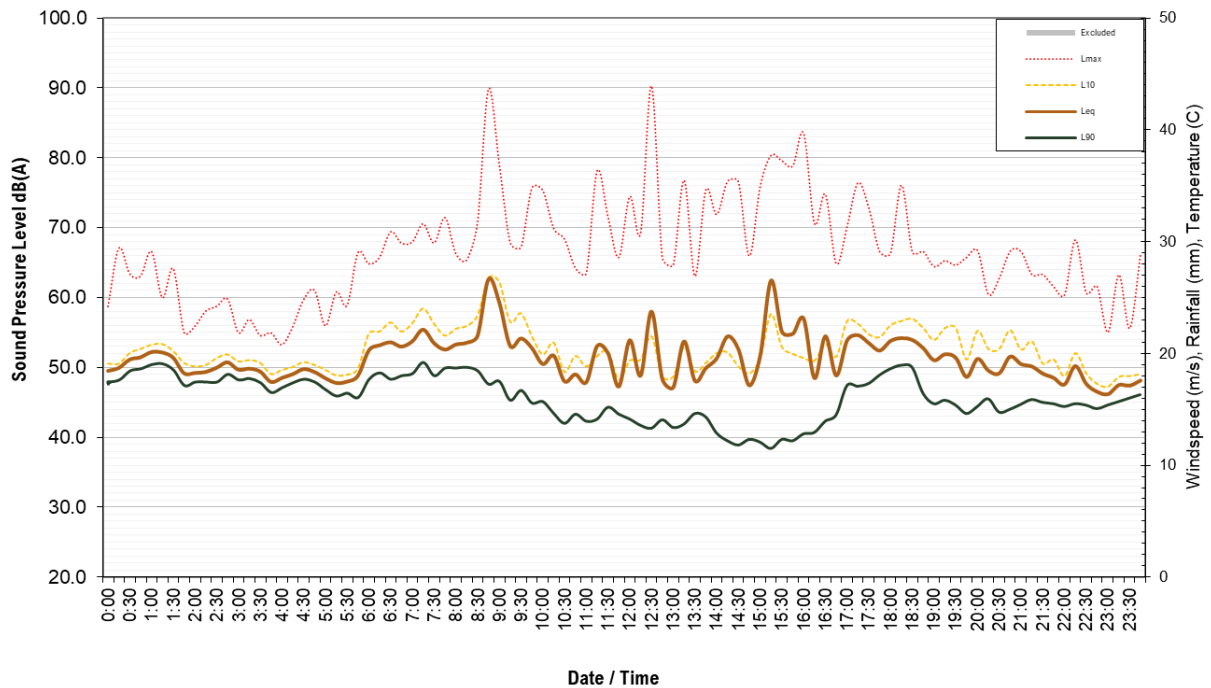


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Mattraville

CLIENT: Hutchison Ports Australia

Sunday 13 July 2025

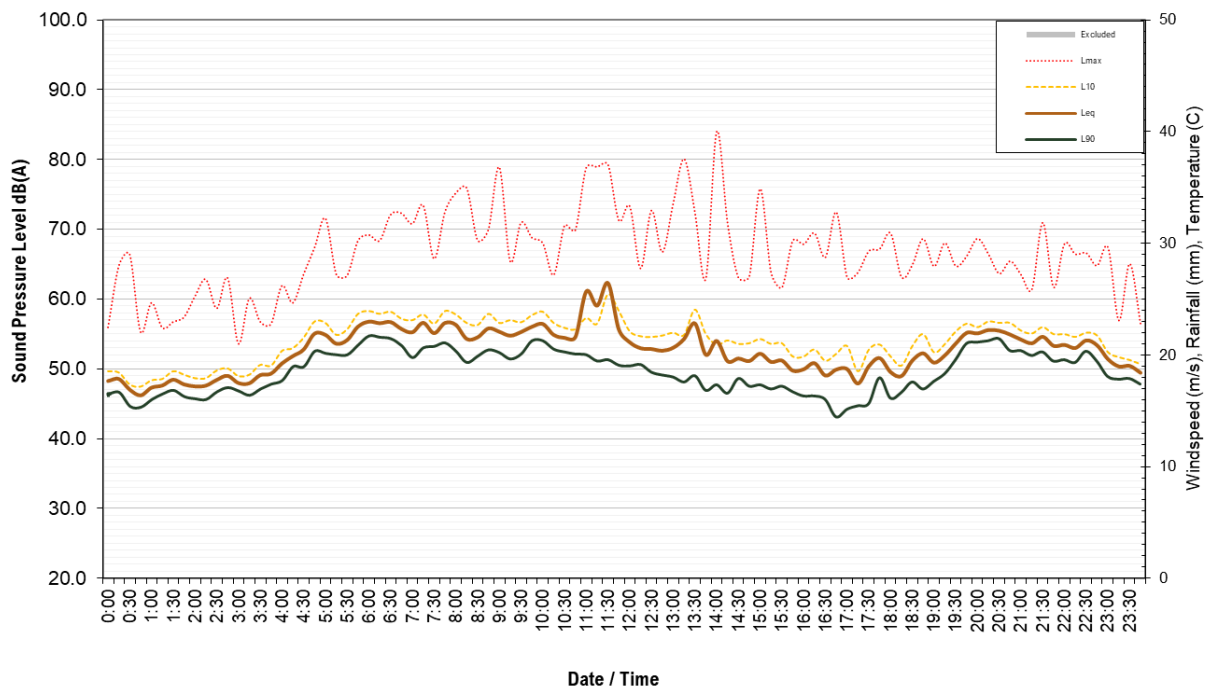


PROJECT: SICTL - July 2025

### Background Noise Levels - 78 Aus Avenue, Mattraville

CLIENT: Hutchison Ports Australia

Monday 14 July 2025



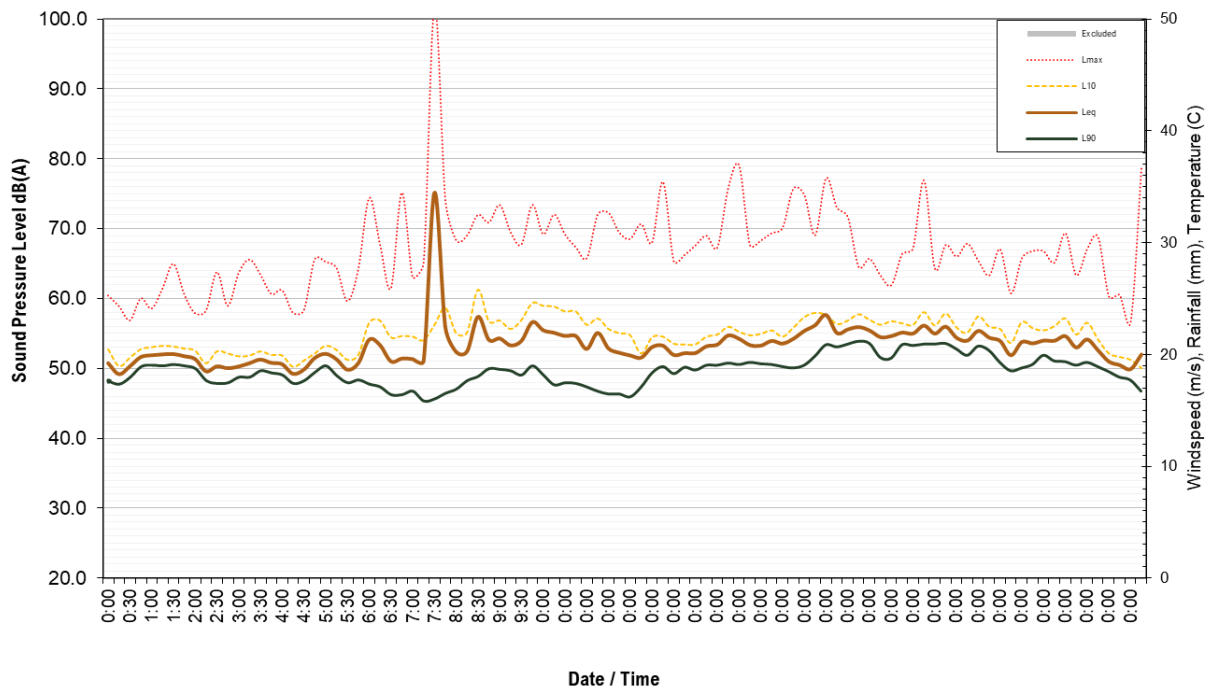


PROJECT: SICTL - July 2025

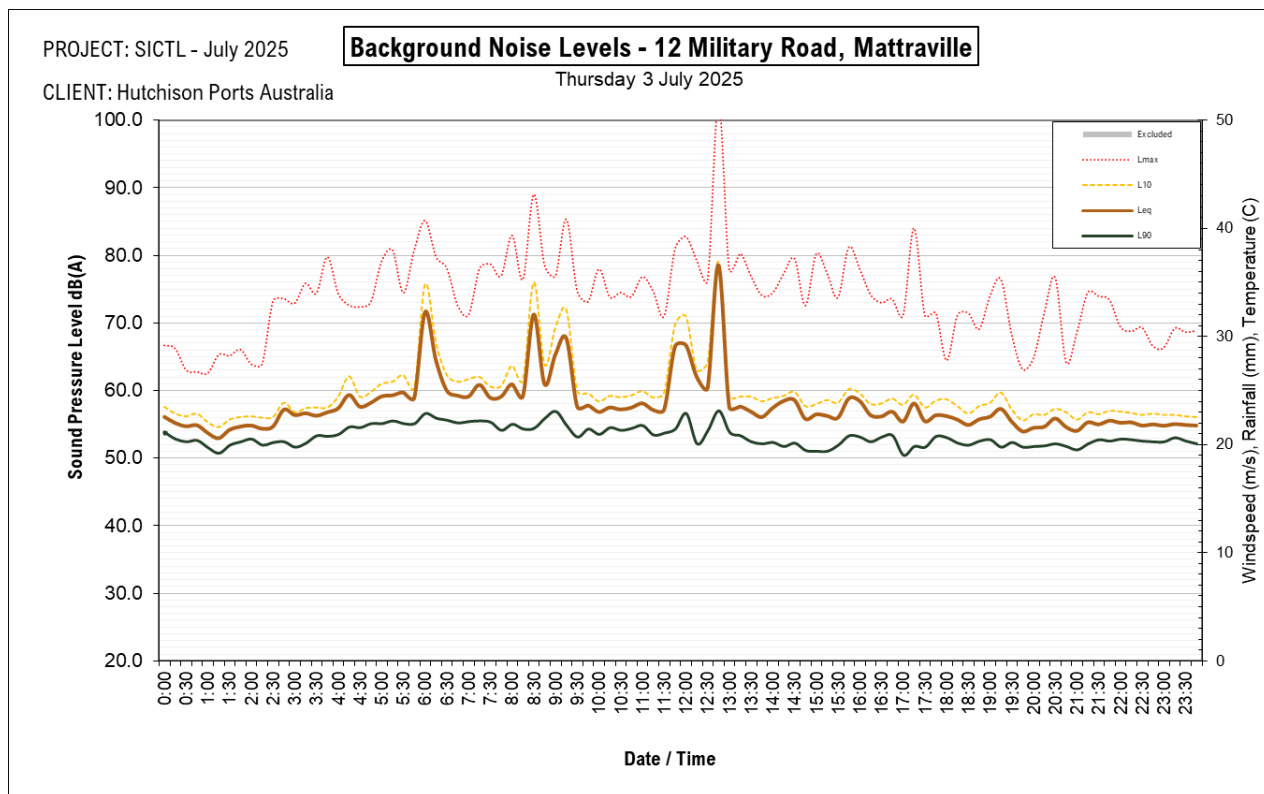
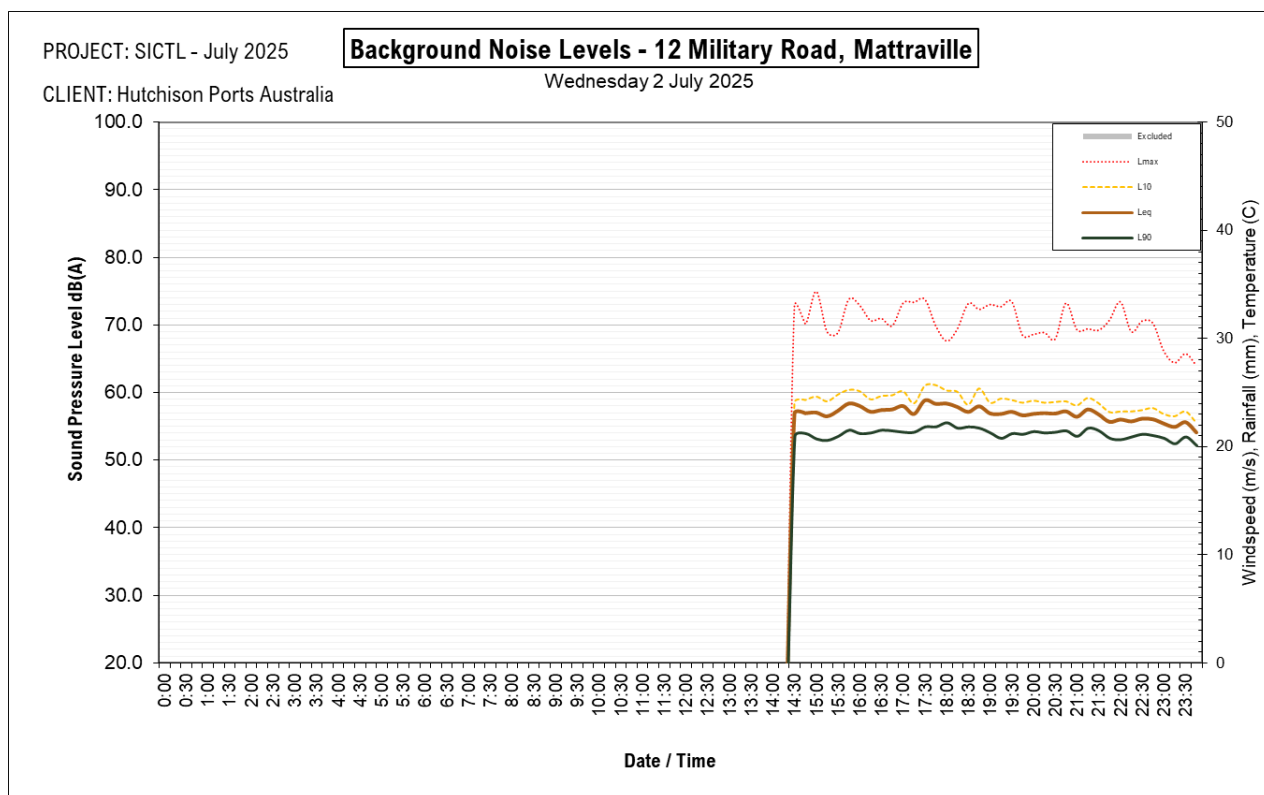
**Background Noise Levels - 78 Aus Avenue, Matraville**

Tuesday 15 July 2025

CLIENT: Hutchison Ports Australia



## Appendix D 12 Military Road Noise Survey Graphs

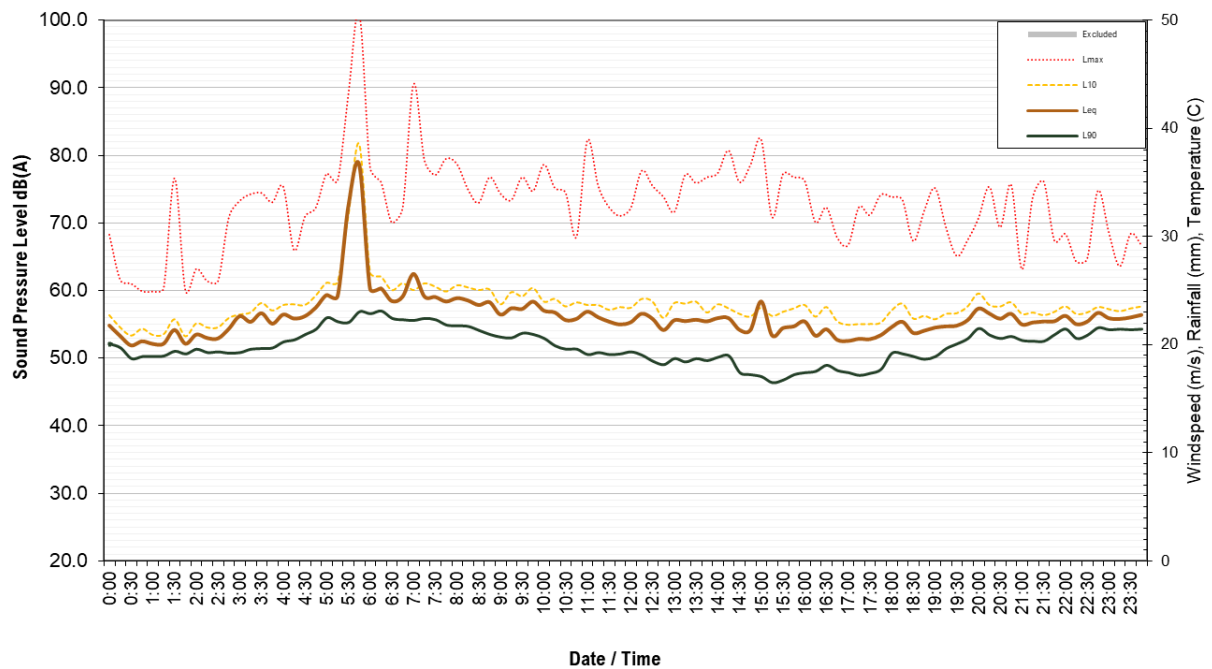


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Matraville

CLIENT: Hutchison Ports Australia

Friday 4 July 2025

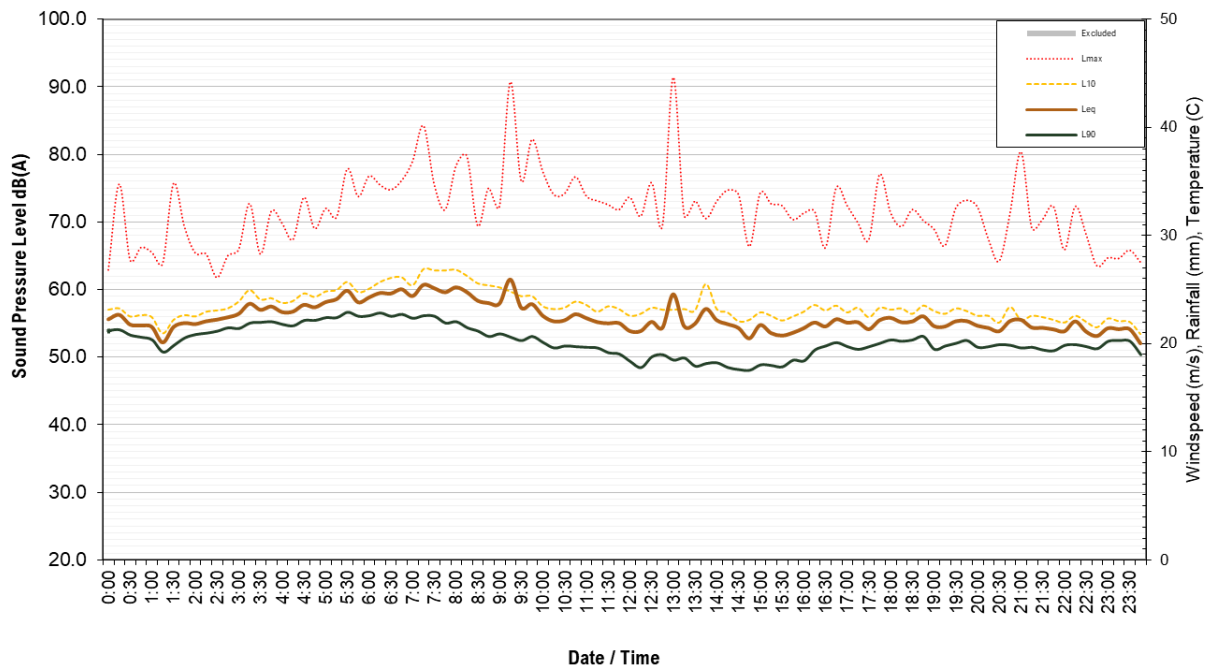


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Matraville

CLIENT: Hutchison Ports Australia

Saturday 5 July 2025

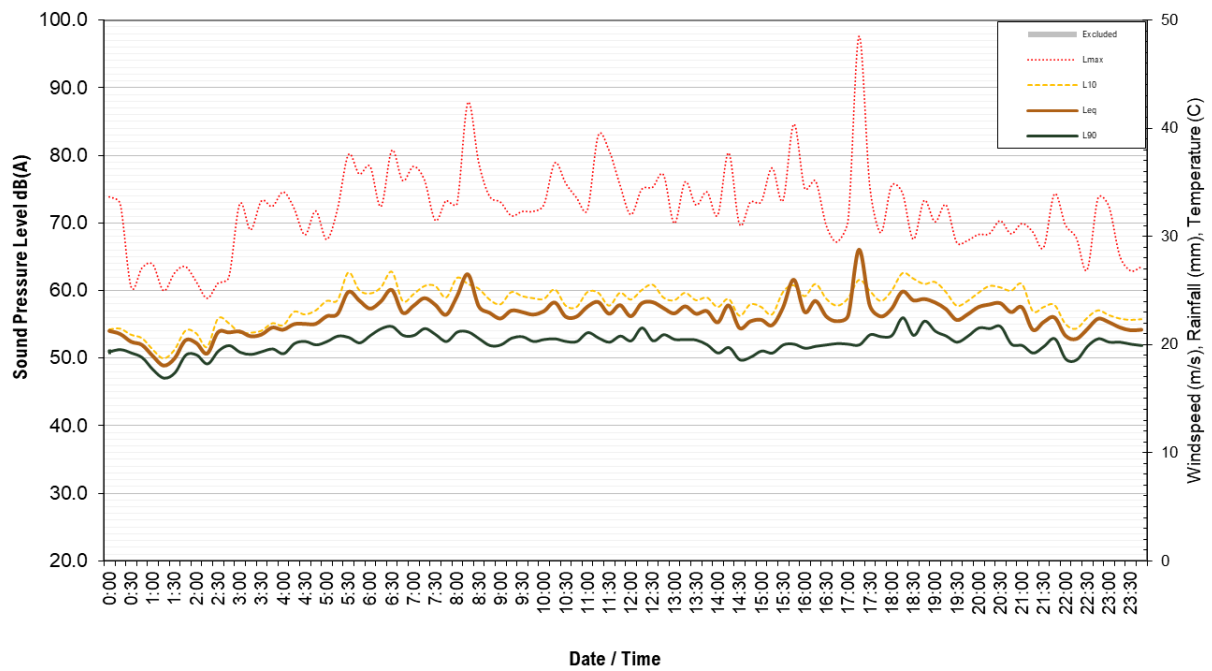


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Matraville

CLIENT: Hutchison Ports Australia

Sunday 6 July 2025

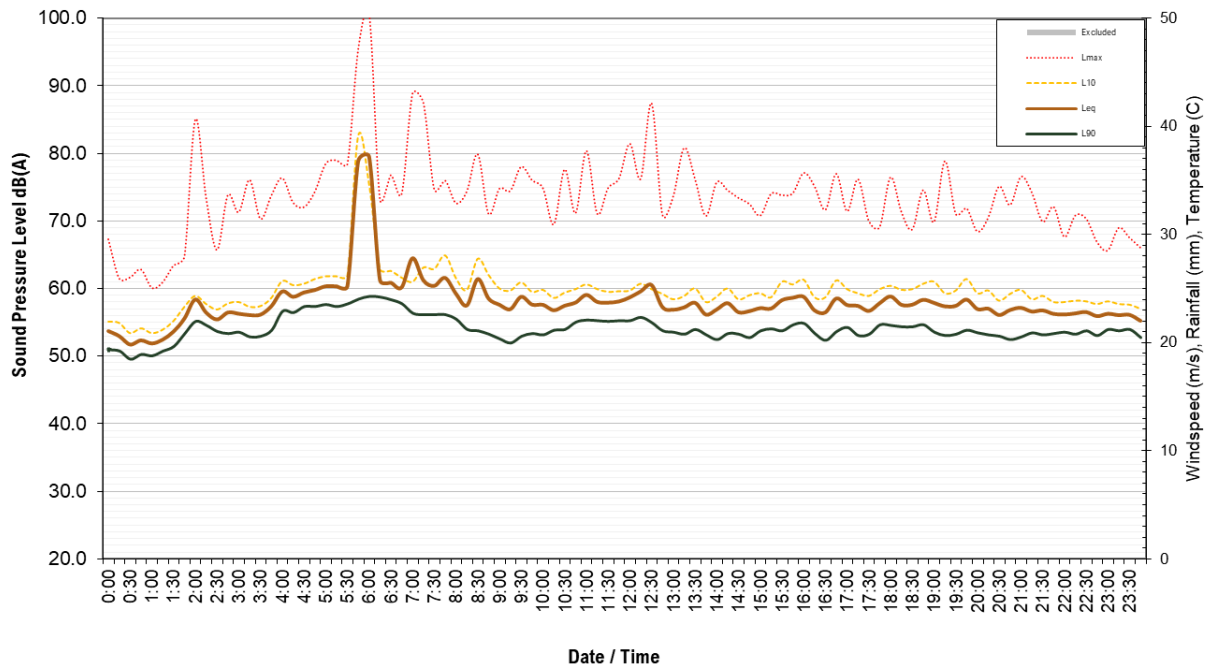


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Matraville

CLIENT: Hutchison Ports Australia

Monday 7 July 2025

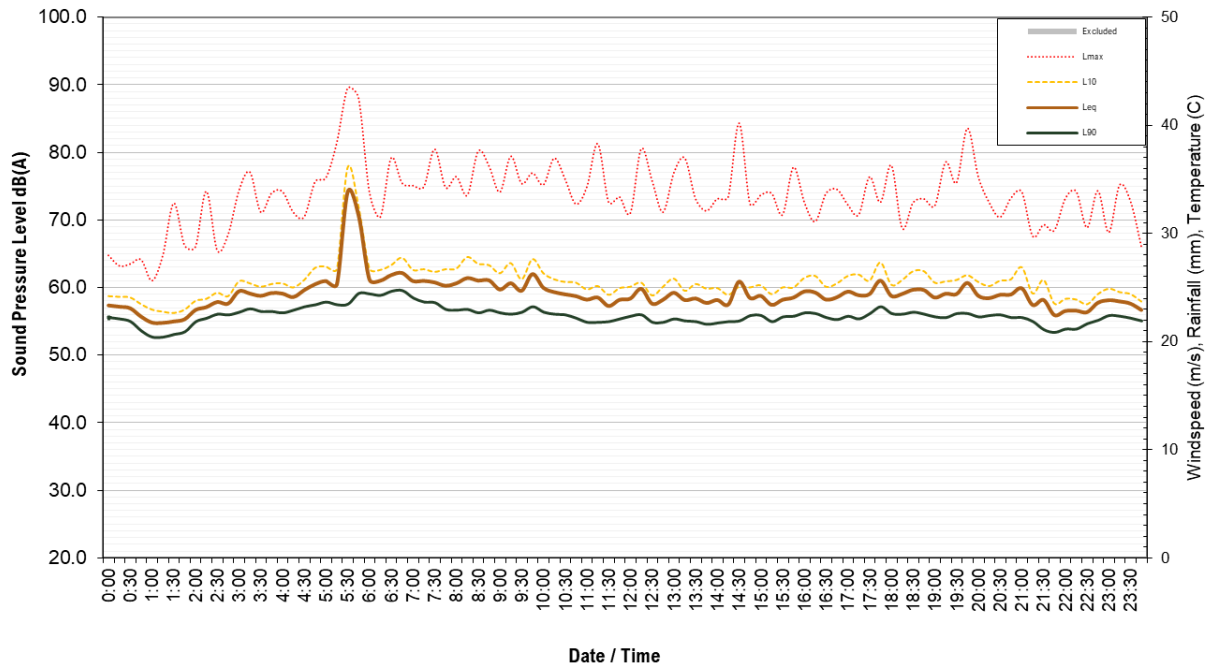


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Matraville

CLIENT: Hutchison Ports Australia

Tuesday 8 July 2025



PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Matraville

CLIENT: Hutchison Ports Australia

Wednesday 9 July 2025



PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Mattraville

CLIENT: Hutchison Ports Australia

Thursday 10 July 2025



PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Mattraville

CLIENT: Hutchison Ports Australia

Friday 11 July 2025

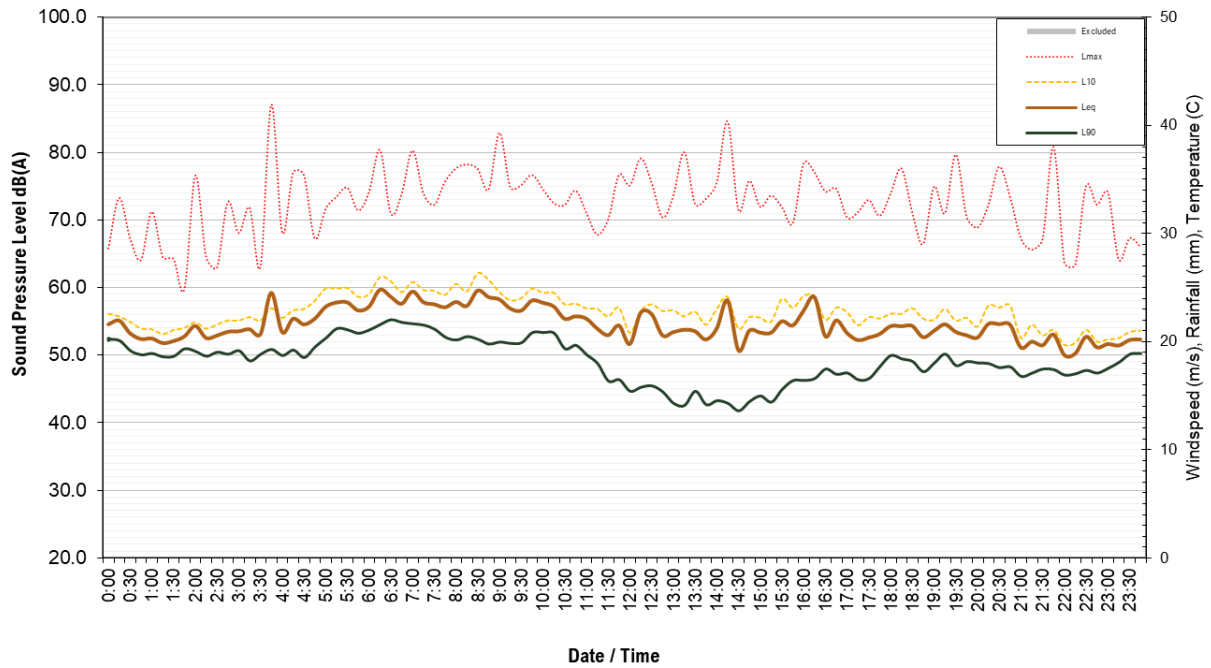


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Mattraville

CLIENT: Hutchison Ports Australia

Saturday 12 July 2025

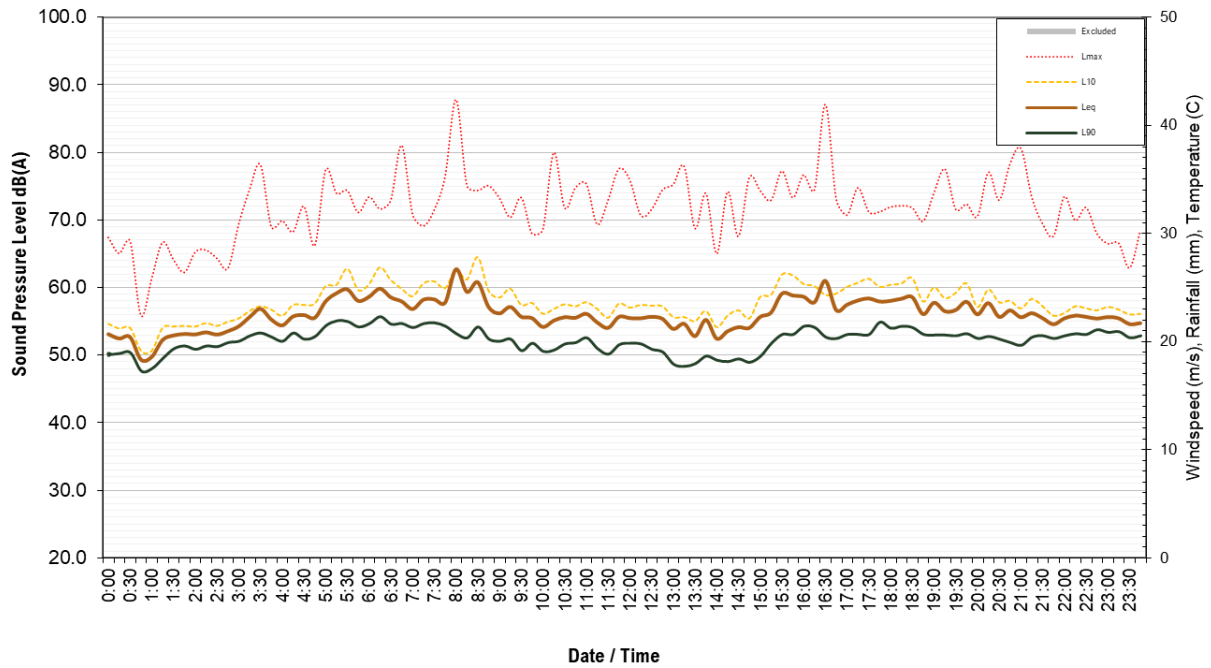


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Mattraville

CLIENT: Hutchison Ports Australia

Sunday 13 July 2025



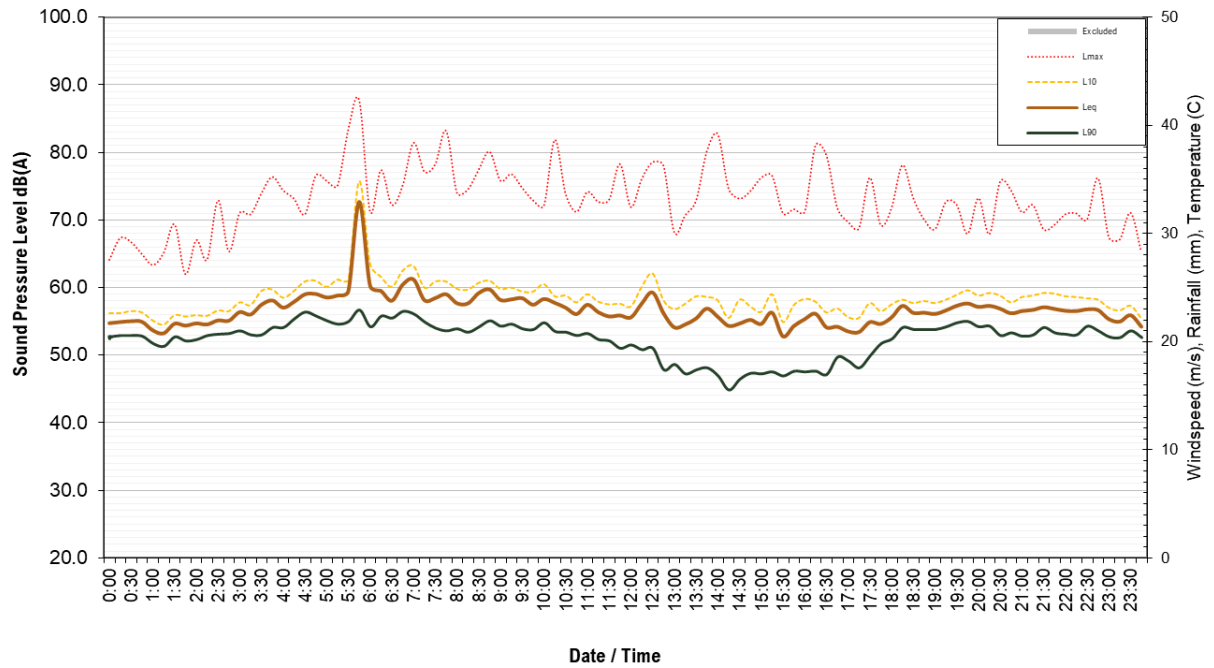


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Mattraville

CLIENT: Hutchison Ports Australia

Monday 14 July 2025

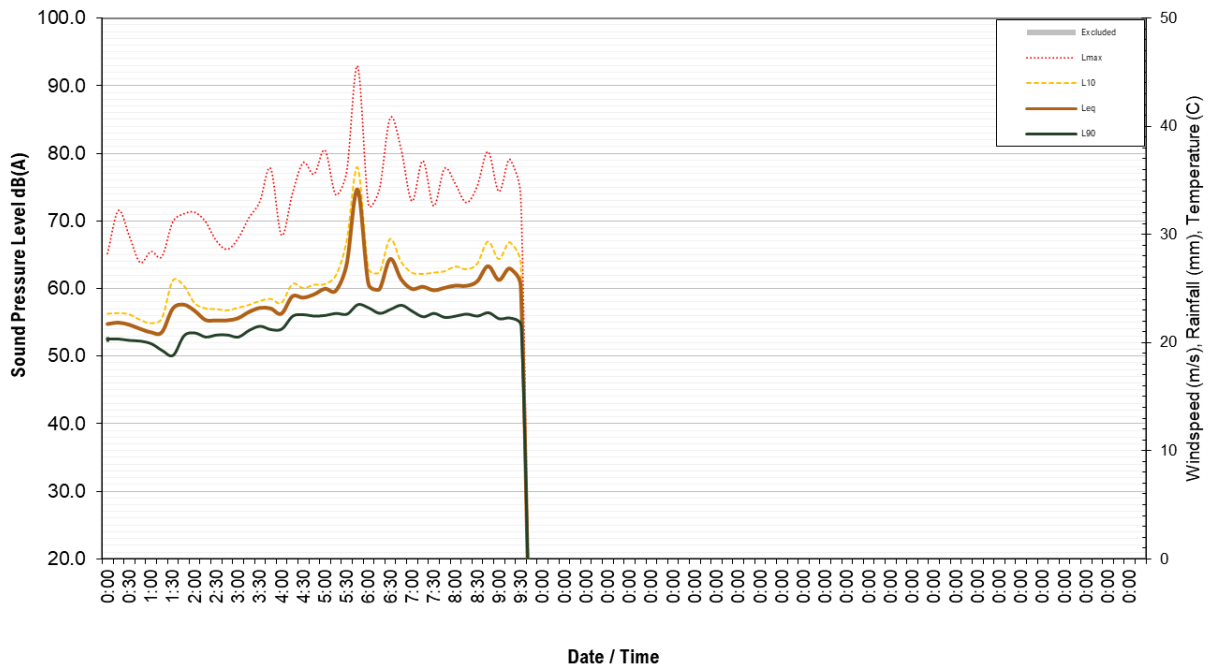


PROJECT: SICTL - July 2025

### Background Noise Levels - 12 Military Road, Mattraville

CLIENT: Hutchison Ports Australia

Tuesday 15 July 2025



## Appendix E SICTL Shipping Schedules

The shipping schedule provided by SICTL to NVAQ prior to the noise survey period contained within this report and has been reproduced below for reference.

MON 30-Jun			TUE 1-Jul			WED 2-Jul			THU 3-Jul			FRI 4-Jul			SAT 5-Jul			SUN 6-Jul		
N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E
ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD				
	RAIL	RAIL		RAIL	RAIL		RAIL	RAIL		RAIL	RAIL		RAIL	RAIL						
4V	4V	4V										5V	5V	5V	5V	5V	5V	5V	5V	5V
			SC15	SC15	SC15	SC15	SC15	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC03	SC03	SC03
												QC1	QC1	QC1	QC1	QC1	QC1	QC1	QC1	QC1
			RS05	RS05	RS05	RS05	RS05	RS05	RS05	RS05	RS05	RS05	RS05	RS05						

ASAL OOCL TEXAS			ESL WINNER														
1	3	2-EXT	1		1	1	1										
A3 - OOCL KUALA LUMPUR		A3 - COSCO ROTTERDAM								ASAL RIO GRANDE			A3 - OOCL				
3	3			1	3	1	2	2	3	2		2	3	3			

MON 7-Jul			TUE 8-Jul			WED 9-Jul			THU 10-Jul			FRI 11-Jul			SAT 12-Jul			SUN 13-Jul		
N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E
ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD	ROAD						
	RAIL	RAIL		RAIL	RAIL	RAIL	RAIL	RAIL		RAIL	RAIL		RAIL	RAIL						
5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5L	5L	5L	5L	5L	5L	5L	5L	5L
SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03	SC03
SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC01	SC02	SC02
QC3	QC3	QC3	QC3			QC3	QC3	QC3	QC3											
						RS05	RS05	RS05	RS05	RS05	RS05	RS05	RS05	RS05	RS03	RS03	RS03	RS03	RS03	RS03

CELANDINE																		
ITALY							ASAL COSCO ISTANBUL			A3 - COSCO SINGAPORE								

