

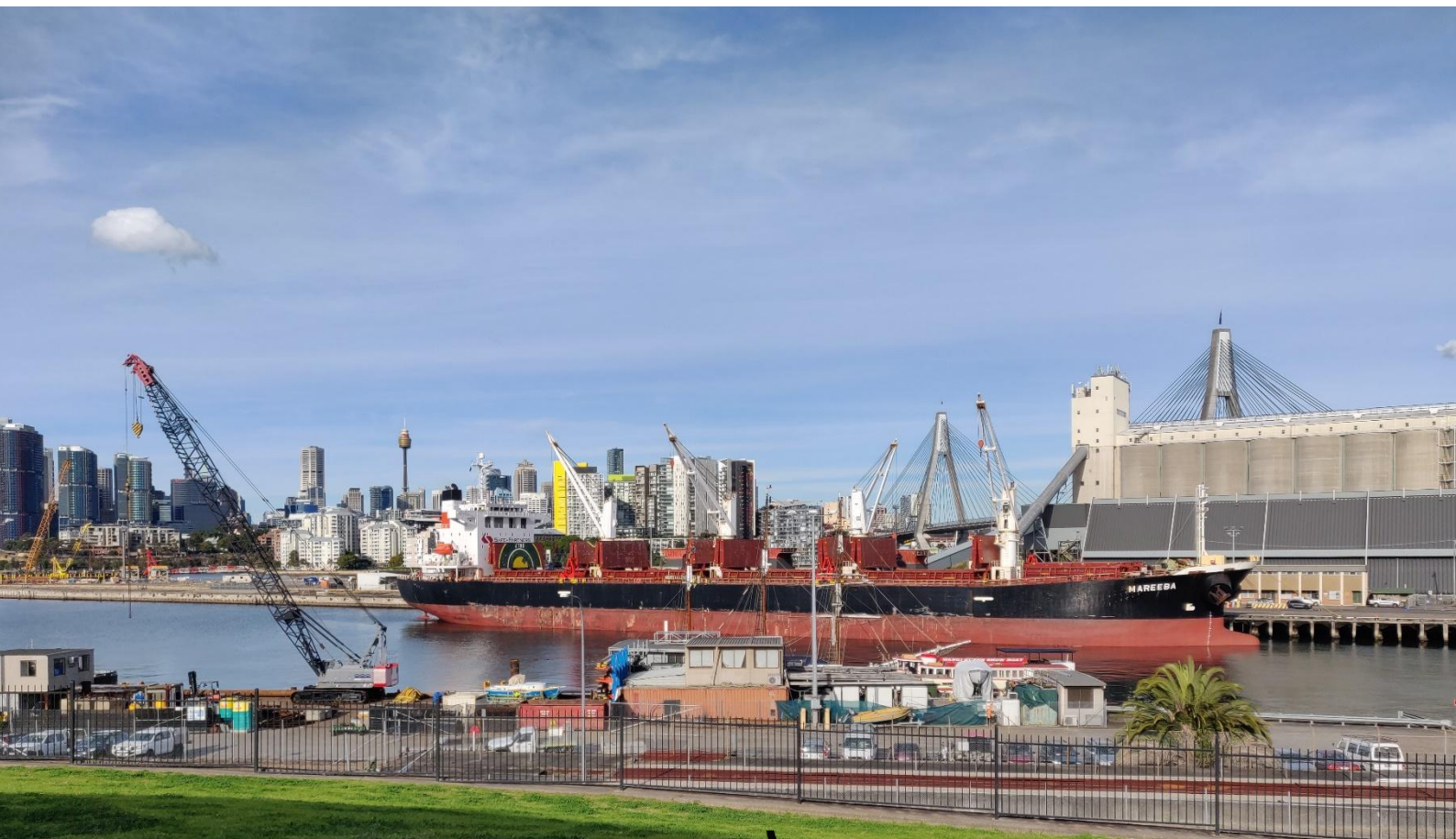


# Monthly compliance noise monitoring report

**Glebe Island / White Bay**

Port Authority of New South Wales

August 2025



**The Power of Commitment**

**GHD Pty Ltd | ABN 39 008 488 373**

133 Castlereagh Street, Level 15

Sydney, New South Wales 2000, Australia

**T** +61 2 9239 7100 | **F** +61 2 9239 7199 | **E** [sydmal@ghd.com](mailto:sydmal@ghd.com) | **ghd.com**

<b>Author</b>	Chris Gordon
<b>Client name</b>	Port Authority of New South Wales
<b>Document title</b>	Monthly compliance noise monitoring report – August 2025
<b>Revision version</b>	Rev 1
<b>Project number</b>	12540862

#### Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4	0	C Gordon	M Oosterlaken		P Pandey		25/09/2025
S4	1	C Gordon	M Oosterlaken		P Pandey		01/12/2025

© GHD 2025

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

# 1. Introduction

GHD Pty Ltd (GHD) has been engaged by Port Authority of New South Wales (Port Authority) to undertake compliance noise monitoring, as required by the *Port Noise Policy (Port Authority, 2020)*.

This report provides the details of the compliance noise monitoring for all vessels at berth during August 2025, as determined using the noise monitoring system. A detailed description of the permanent noise monitoring system including a map of monitoring locations is provided in the Noise Monitoring Plan, available on Port Authority's website.

# 2. Noise monitoring details and vessel schedule

Client	Company details	Noise monitor name	Noise monitor location	Noise monitor details / settings	Noise monitor serial numbers	Monthly calibration variance
Port Authority of New South Wales	GHD Pty Ltd	L01	Grafton Street, Balmain	<b>Meter details</b> Norsonic Nor145 Sound Level Meter with Nor1297 Noise Compass	14529642	<b>Initial calibration level 91.9 dBA</b> Min. deviation = 0.0 dB Max. deviation = 0.1 dB
	Member of the Association of Australasian Acoustical Consultants (AAAC)	L02	Maintenance Building on White Bay		14529645	<b>Initial calibration level 91.3 dBA</b> Min. deviation = 0.0 dB Max. deviation = 0.1 dB
	Lead staff are Members of the Australian Acoustical Society (AAS)	L03	Adjacent to White Bay 2	<b>Meter settings</b> A-weighted Fast time response 15 minute intervals	14529644	<b>Initial calibration level 92.9 dBA</b> Min. deviation = -0.1 dB Max. deviation = 0.0 dB
		L04	Onsite at Glebe Island		14529646	<b>Initial calibration level 94.3 dBA</b> Min. deviation = -0.1 dB Max. deviation = 0.1 dB
Vessel name	Arrival date and time	Departure date and time		Berth location	Applicable noise monitoring location/s	
<b>Bulk vessels</b>						
Pioneer <sup>1</sup>	July 28, 2025 / 17:20	August 1, 2025 / 07:52		GLB7	L03	
Khojaly <sup>2</sup>	August 1, 2025 / 12:03	August 5, 2025 / 01:59		GLB7	L03	

Vessel name	Arrival date and time	Departure date and time	Berth location	Applicable noise monitoring location/s
Kondili	August 7, 2025 / 05:02	August 10, 2025 / 00:55	GLB8	L03
Regina Island <sup>3</sup>	August 28, 2025 / 00:53	August 31, 2025 / 09:51	GLB7	L03
<b>Cruise vessel</b>				
Carnival Adventure	August 22, 2025 / 05:27	August 22, 2025 / 15:29	WBCT	L01
Carnival Adventure	August 25, 2025 / 05:35	August 25, 2025 / 16:25	WBCT	L01
<b>Other vessels</b>				
HMNZS TE KAHA	August 11, 2025 / 12:03	August 15, 2025 / 10:48	WBCT	L01
Yu Peng <sup>4</sup>	August 22, 2025 / 21:47	August 31, 2025 / 20:03	GLB2	Attended <sup>4</sup>

Notes:

- 1) Results for the Pioneer are contained in the July report
- 2) A movement of Khojaly was recorded at 23:08 on 02/08/2025, but the vessel did not leave GLB7
- 3) A movement of Regina Island was recorded at 12:10 on 29/08/2025, but the vessel did not leave GLB7.
- 4) Results from the attended noise monitoring will be presented in a specific report.

## 2.1 Compliance summary

## 2.2 Bulk vessels / other vessels

Vessel	Dates at berth	Monitor location	Vessel Noise Level, dBA (inclusive of any modifying factor penalties)			Vessel Noise Trigger Levels, dBA			Compliance <sup>1</sup>		
			Day <sup>2</sup> L <sub>Aeq</sub> (15 hr)	Night <sup>3</sup> L <sub>Aeq</sub> (1 hr)	Night L <sub>Amax</sub>	Day <sup>2</sup> L <sub>Aeq</sub> (15 hr)	Night <sup>3</sup> L <sub>Aeq</sub> (1 hr)	Night L <sub>Amax</sub>	Day <sup>2</sup> L <sub>Aeq</sub> (15 hr)	Night <sup>3</sup> L <sub>Aeq</sub> (1 hr)	Night L <sub>Amax</sub>
<b>Bulk vessels</b>											
Pioneer	July 28 – Aug 01	L03	56	57 <sup>4</sup>	58	60	55	65	Yes	No <sup>4</sup>	Yes
Khojaly	Aug 1 – Aug 5	L03	52	52	62	60	55	65	Yes	Yes	Yes
Kondili	Aug 7 – Aug 10	L03	55	52	64	60	55	65	Yes	Yes	Yes
HMNZS TE KAHA	Aug 11 – Aug 15	L01	58	54	65	60	55	65	Yes	Yes	Yes
Yu Peng	Aug 22 – Aug 31	Attended	58	55	– <sup>5</sup>	60	55	65	Yes	Yes	Yes
Regina Island	Aug 28 – Aug 31	L03	53	53	62	60	55	65	Yes	Yes	Yes

Notes:

- 1) If non-compliance is detected, a detailed investigation of the results will be undertaken and reported separately if required
- 2) Daytime period (7 am to 10 pm) – 15 hour logarithmic average
- 3) Night-time (10 pm to 7 am) – loudest 1 hour period
- 4) The system identified that the vessel was tonal at 3,150 Hz for 1 hours between 10:00 pm to 11:00 pm on July 29. The tonal noise was not present at any other time, with all other hours being compliant and the impact is not considered significant.
- 5) No maximum noise levels were recorded during the monitoring period

## 2.3 Cruise vessels

Vessel	Dates at berth	Monitor location	Vessel Noise Level, dBA (inclusive of any modifying factor penalties)		Vessel Noise Trigger Levels, dBA		Compliance <sup>1</sup>	
			Day <sup>2</sup> L <sub>Aeq</sub> (15 hr)	Night <sup>3</sup> L <sub>Aeq</sub> (9 hr)	Day <sup>2</sup> L <sub>Aeq</sub> (15 hr)	Night <sup>3</sup> L <sub>Aeq</sub> (9 hr)	Day <sup>5</sup>	Night
Carnival Adventure	August 21 <sup>4</sup>	L01	-	56	N/A	58	N/A	Yes
	August 22	L01	59	-	N/A	58	N/A	-
	August 24 <sup>5</sup>	L01	-	54	N/A	58	N/A	Yes
	August 25	L01	58	-	N/A	58	N/A	-

### Notes:

- 1) If non-compliance is detected, a detailed investigation of the results will be undertaken and reported separately if required
- 2) Daytime period (7 am to 10 pm) – 15 hour logarithmic average
- 3) Night-time (10 pm to 7 am) – 9 hour logarithmic average
- 4) The system classifies August 21 as the period from 7 am on August 21 to 7 am on August 22. The Carnival Adventure arrived at 05:27 am on August 22, and has been incorporated in the data for August 21
- 5) The system classifies August 24 as the period from 7 am on August 24 to 7 am on August 25. The Carnival Adventure arrived at 05:35 am on August 25, and has been incorporated in the data for August 24

Port Authority provides attenuation to a defined area of residences where noise modelling indicates that current noise levels reach or exceed 55 dBA at night ('attenuation eligibility trigger'). Under the White Bay Cruise Terminal Noise Restriction Policy, cruise ship noise which causes further residences than those currently identified to exceed the attenuation eligibility trigger is considered to be Excessive Noise. Hence under the Noise Restriction Policy a day time trigger level does not apply. The area of residences currently offered attenuation (ie meeting the 'attenuation eligibility trigger') is based on a reference cruise vessel intrusive noise level of 58 dBA at the nearest residence, which sets the Vessel Noise Trigger Level for assessing compliance at night.

Excessive noise is defined as "any noise including but not limited to engine, generator or ventilation noise which causes further residences than those currently identified to exceed the attenuation eligibility trigger."

### 3. Detailed results – bulk vessels / other vessels

#### 3.1 Khojaly (GLB7) – August 1 – August 5, 2025

##### 3.1.1 Daily noise monitoring results

Date	Time period <sup>1</sup>	Monitor location	Noise descriptor	Vessel noise level dBA <sup>2</sup>	Tonal	LFN <sup>3</sup>	Vessel Noise Trigger Levels, dBA	Compliance
August 1 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	51	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	50	No	No	55	Yes
			L <sub>Amax</sub>	60	-	-	65	Yes
August 2 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	52	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	52	No	No	55	Yes
			L <sub>Amax</sub>	62	-	-	65	Yes
August 3 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	52	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	50	No	No	55	Yes
			L <sub>Amax</sub>	62	-	-	65	Yes
August 4 2025 <sup>4</sup>	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	49	No	Yes	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	46	No	Yes	55	Yes
			L <sub>Amax</sub>	56	-	-	65	Yes

Notes

1) Daytime period (7 am to 10 pm) – 15 hours  
Night-time period (10 pm to 7 am) – worst case 1 hour

2) Inclusive of any penalties for modifying factors

3) LFN = Low Frequency Noise

4) The system classifies August 4 as the period from 7 am on August 4 to 7 am on August 5. The Khojaly departed at 01:59 am on August 5, and has been incorporated in the data for August 4

##### 3.1.2 Additional information

The vessel was manually processed, therefore spectrum and polar plot was not available.

## 3.2 Kondili (GLB8) – August 7 – August 10, 2025

### 3.2.1 Daily noise monitoring results

Date	Time period <sup>1</sup>	Monitor location	Noise descriptor	Vessel noise level dBA <sup>2</sup>	Tonal	LFN <sup>3</sup>	Vessel Noise Trigger Levels, dBA	Compliance
August 6 <sup>4</sup> 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	-	-	-	60	-
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	50	No	No	55	Yes
			L <sub>Amax</sub>	64 <sup>5</sup>	-	-	65	Yes
August 7 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	55	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	51	No	No	55	Yes
			L <sub>Amax</sub>	60	-	-	65	Yes
August 8 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	55	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	52	No	No	55	Yes
			L <sub>Amax</sub>	59	-	-	65	Yes
August 9 2025 <sup>6</sup>	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	54	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	-	-	-	55	-
			L <sub>Amax</sub>	-	-	-	65	-

#### Notes

1) Daytime period (7 am to 10 pm) – 15 hours

Night-time period (10 pm to 7 am) – worst case 1 hour

2) Inclusive of any penalties for modifying factors

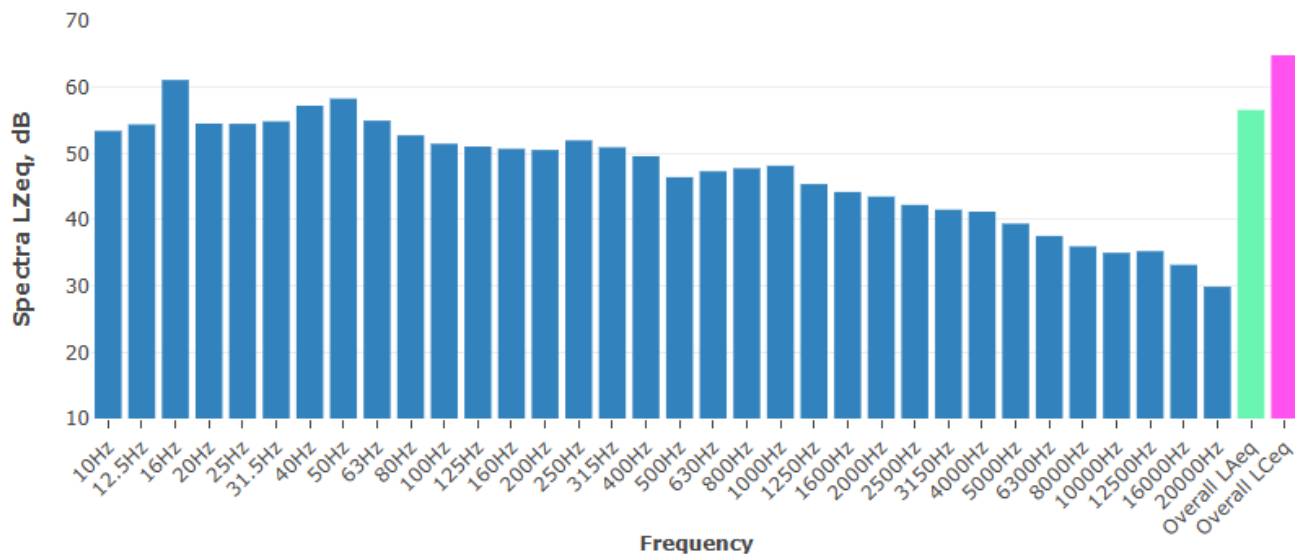
3) LFN = Low Frequency Noise

4) The system classifies August 6 as the period from 7 am on August 6 to 7 am on August 7. The Kondili arrived at 05:02 am on August 7, and has been incorporated in the data for August 6

5) There was a minor exceedance of the night-time vessel noise trigger level for 1 hour between 6:00 and 7:00 am on July 23. This was not associated with the vessel and has therefore been removed

6) The system classifies August 9 as the period from 7 am on August 9 to 7 am on August 10. The Kondili departed at 00:55 am on August 10, and has been incorporated in the data for August 9

### 3.2.2 Additional information



Note: The overall frequency spectrum can be classified into low ( $\leq 160$  Hz), medium (160-2000 Hz) and high ( $\geq 2000$  Hz) frequencies. Where low frequency components are identified in the hourly spectra, the frequency bars are shaded in cyan. Where tones are identified in the hourly spectra, the frequency bars are shaded in red.

Figure 3.1 Typical vessel spectrum – noise level at L03

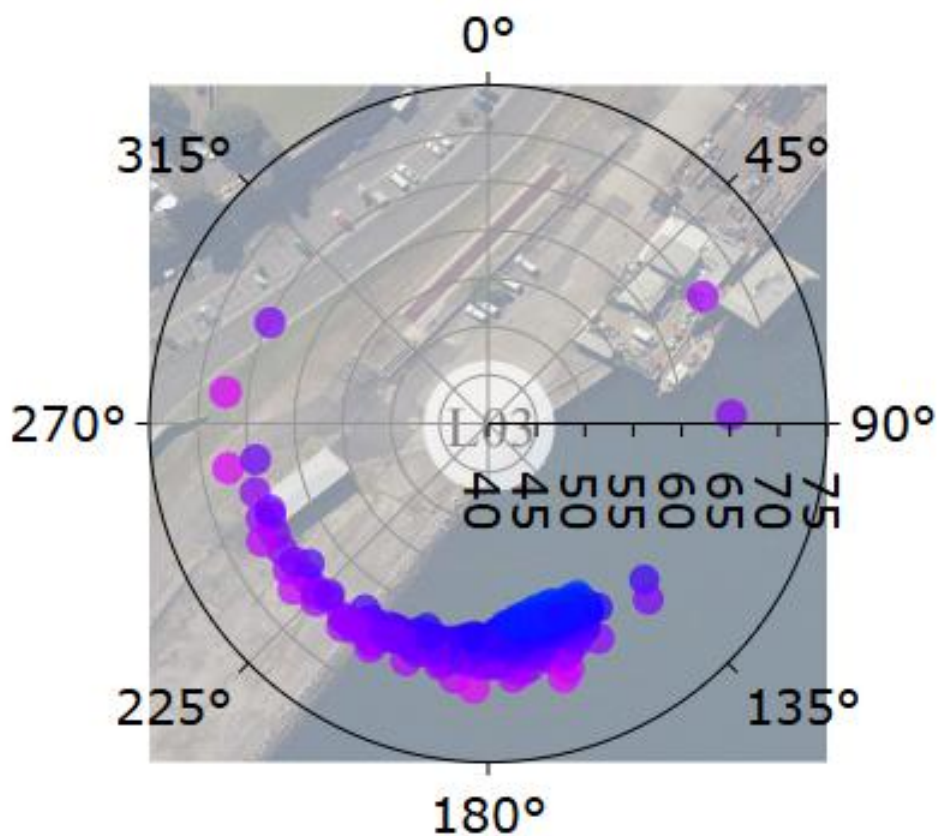


Figure 3.2 Typical vessel polar (directional) plot

### 3.3 HMNZS TE KAHA (WBCT) – August 11 – August 15, 2025

#### 3.3.1 Daily noise monitoring results

Date	Time period <sup>1</sup>	Monitor location	Noise descriptor	Vessel noise level dBA <sup>2</sup>	Tonal	LFN <sup>3</sup>	Vessel Noise Trigger Levels, dBA	Compliance
August 12 2025	Day	L01	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	51	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	51	No	No	55	Yes
			L <sub>Amax</sub>	65	-	-	65	Yes
August 13 2025	Day	L01	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	53	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	54	No	No	55	Yes
			L <sub>Amax</sub>	64	-	-	65	Yes
August 14 2025	Day	L01	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	55	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	50	No	No	55	Yes
			L <sub>Amax</sub>	63	-	-	65	Yes
August 15 2025	Day	L01	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	58	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	-	-	-	55	-
			L <sub>Amax</sub>	-	-	-	65	-
Notes 1) Daytime period (7 am to 10 pm) – 15 hours Night-time period (10 pm to 7 am) – worst case 1 hour 2) Inclusive of any penalties for modifying factors 3) LFN = Low Frequency Noise								

### 3.3.2 Additional information

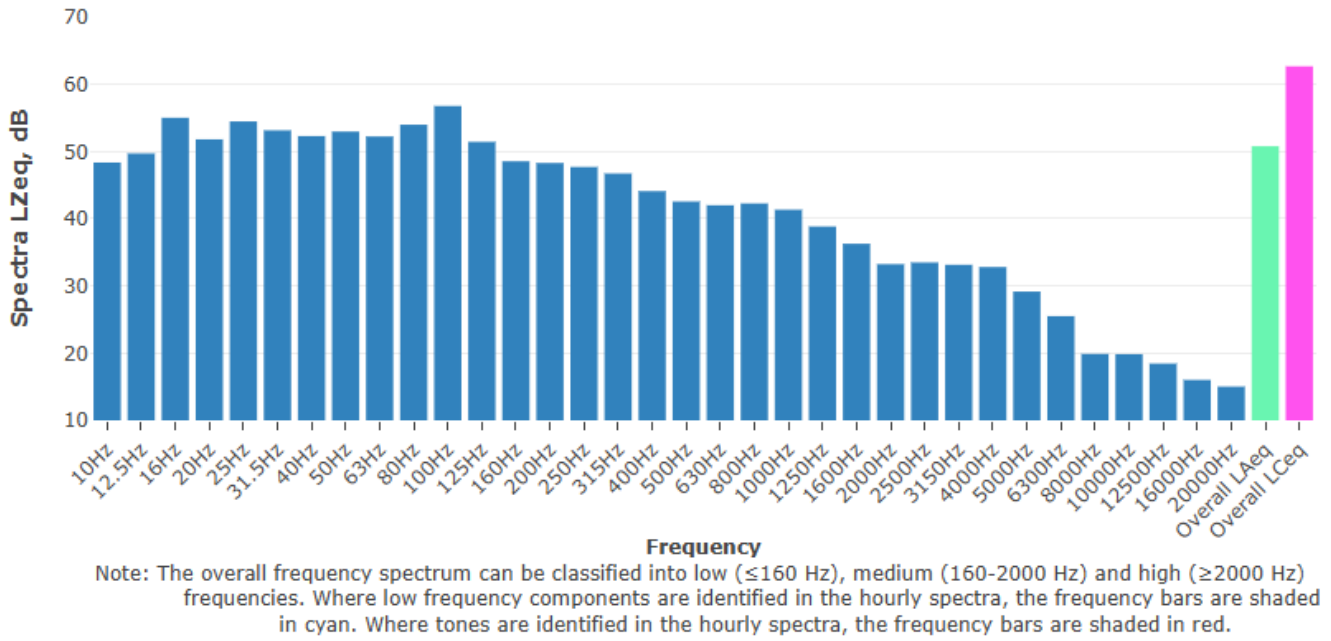


Figure 3.3 Typical vessel spectrum – noise level at L01

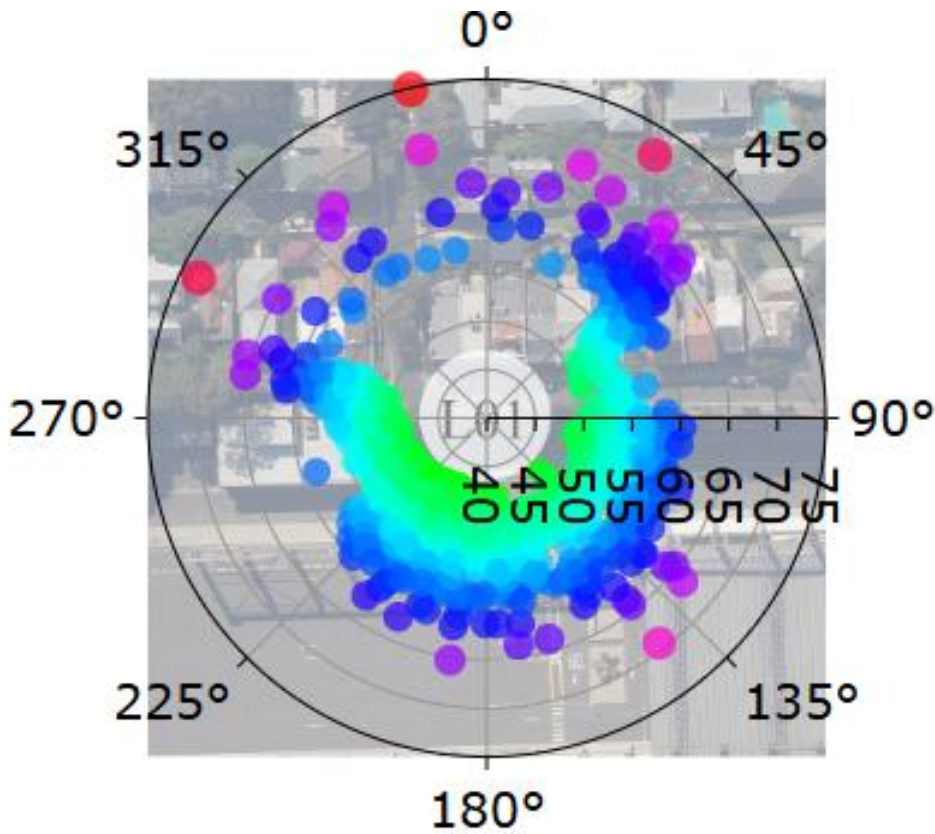


Figure 3.4 Typical vessel polar (directional) plot

## 3.4 Regina Island (GLB7) – August 28 – August 31, 2025

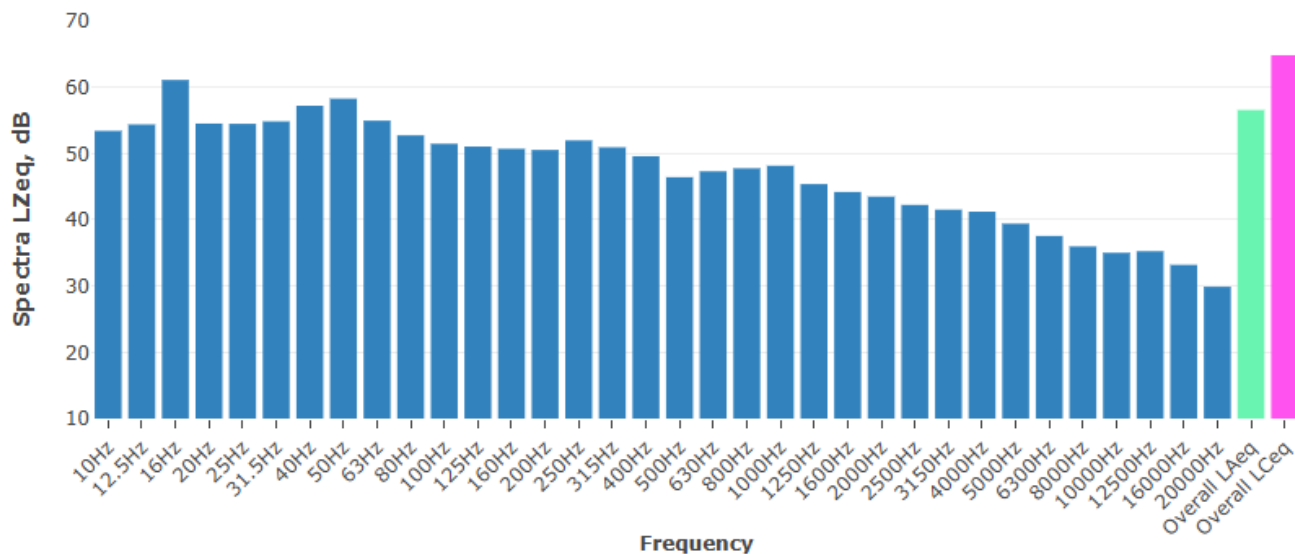
### 3.4.1 Daily noise monitoring results

Date	Time period <sup>1</sup>	Monitor location	Noise descriptor	Vessel noise level dBA <sup>2</sup>	Tonal	LFN <sup>3</sup>	Vessel Noise Trigger Levels, dBA	Compliance
August 27 <sup>4</sup> 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	-	No	No	60	-
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	52	No	No	55	Yes
			L <sub>Amax</sub>	59	-	-	65	Yes
August 28 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	53	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	53	No	No	55	Yes
			L <sub>Amax</sub>	62	-	-	65	Yes
August 29 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	53	No	Yes	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	53	No <sup>5</sup>	Yes	55	Yes
			L <sub>Amax</sub>	61	-	-	65	Yes
August 30 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	53	No	Yes	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	53	No	Yes	55	Yes
			L <sub>Amax</sub>	59	-	-	65	Yes
August 31 2025	Day	L03	L <sub>Aeq</sub> , 15 hour <sup>1</sup>	50	No	No	60	Yes
	Night		L <sub>Aeq</sub> , 1 hour <sup>1</sup>	-	-	-	55	-
			L <sub>Amax</sub>	-	-	-	65	-

#### Notes

- 1) Daytime period (7 am to 10 pm) – 15 hours  
Night-time period (10 pm to 7 am) – worst case 1 hour
- 2) Inclusive of any penalties for modifying factors
- 3) LFN = Low Frequency Noise
- 4) The system classifies August 27 as the period from 7 am on August 27 to 7 am on August 28. The Regina Island arrived at 00:53 am on August 28, and has been incorporated in the data for August 27
- 5) The system identified that the vessel was tonal at 10,000 Hz between 2:00 am to 3:00 am on August 30. This was not associated with the vessel, therefore the 5 dB correction for tonal noise has not been applied

### 3.4.2 Additional information



Note: The overall frequency spectrum can be classified into low ( $\leq 160$  Hz), medium (160-2000 Hz) and high ( $\geq 2000$  Hz) frequencies. Where low frequency components are identified in the hourly spectra, the frequency bars are shaded in cyan. Where tones are identified in the hourly spectra, the frequency bars are shaded in red.

Figure 3.5 Typical vessel spectrum – noise level at L03

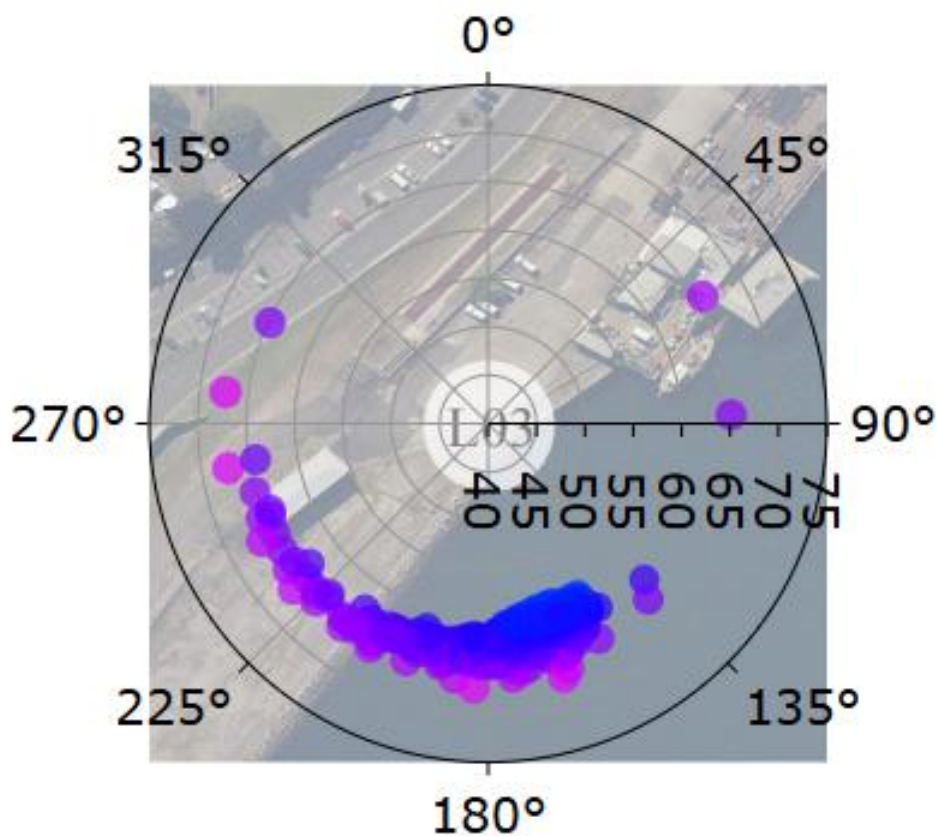


Figure 3.6 Typical vessel polar (directional) plot



[ghd.com](http://ghd.com)

→ **The Power of Commitment**