



Sydney Head Office
Suite 2
174 Willoughby Rd
St Leonards NSW 2065
T: 02 9908 1270

Melbourne Office
Suite 11
70 Racecourse Rd
Nth Melbourne VIC 3051
T: 03 7015 5112

ABN: 36 105 797 715
PO Box 270
Neutral Bay NSW 2089
E: info@acousticdynamics.com.au
W: www.acousticdynamics.com.au



Project 4196
16 December 2025

The Mercantile Hotel (The Rocks) Pty Ltd
C/o- Fugen Constructions Pty Ltd
Attention: Mr Cameron Daly
Level 1, 9-13 Underwood Avenue
BOTANY BAY NSW 2019

Email: cdaly@fugen.com.au
Ph: 02 9289 3700
Mb: 0475 870 270

Dear Cameron

THE MERCANTILE HOTEL – OPERATIONAL NOISE & VIBRATION MANAGEMENT PLAN **LETTER OF ACOUSTIC ADVICE**

1 INTRODUCTION

Acoustic Dynamics is engaged by **Fugen Constructions** to provide an Operation Noise and Vibration Management Plan for the use and operation of the Mercantile Hotel at 25-27 George Street, The Rocks, NSW. The assessment of the noise and vibration management plan has been prepared in accordance with the report (ref: 610.17382-R02-v3.0, dated 7 February 2018) and supplementary letter (ref: 610.17382-L01-V0.2, dated 17 December 2018) prepared by SLR.

This certification has been prepared in accordance with the requirements of:

- (a) City of Sydney Council;
- (b) Liquor and Gaming NSW;
- (c) NSW Department of Planning and Environment (DPE);
- (d) NSW Environment Protection Authority (EPA);
- (e) Association of Australasian Acoustical Consultants (AAAC); and
- (f) Australian Standards.

2 ASSESSMENT CRITERIA AND STANDARDS

Acoustic Dynamics has reviewed the Department of Planning and Environment's (DPE) development consent for SSD 8665 and the following conditions relevant to this assessment are included below:

Acoustic Dynamics has reviewed the Department of Planning and Environment's (DPE) development consent for SSD 8665 and the following conditions relevant to this assessment are included below:

"PART E PRIOR TO OCCUPATION OR COMMENCEMENT OF USE

OPERATIONAL NOISE AND VIBRATION MANAGEMENT PLAN – ROOFTOP AND REAR COURTYARD

- E5. Prior to occupation or commencement of the use, an **Operational Noise and Vibration Management Plan (ONVMP)** for the rooftop and rear courtyard prepared by a suitably qualified

person shall be submitted to the Planning Secretary for approval. The **ONVMP** must be prepared in consultation with Council and the EPA. The **ONVMP** shall include (but not be limited to):

- (a) Be prepared in accordance with the EPA's Noise Policy for Industry
- (b) identify nearby sensitive receivers and land uses;
- (c) identify the noise limits applying to the development;
- (d) identify all key sources of operational noise and vibration;
- (e) details of all reasonable and feasible management and mitigation measures to be implemented to minimise noise and vibration;
- (f) be consistent with and incorporate all relevant recommendations and mitigation measures outlined in the Noise Assessment report (Reference: 610.17382-R02-v3.0) dated 7 February 2018, and Response to Submissions dated 17 December 2018 (Reference: 610.17382-L01-v0.2 20181217.docx), both prepared by SLR;
- (g) include a suitable proactive noise and vibration monitoring program which aims to ensure the noise and vibration criteria in this approval are not exceeded.

Prior to the commencement of use, a copy of the approved **ONVMP** must be submitted to Council, Place Management NSW, the Planning Secretary and the EPA."

3 SLR SSDA NOISE ASSESSMENT REPORT SUMMARY

Acoustic Dynamics has reviewed the SSDA Noise Assessment completed by SLR (ref: 610.17382-R02-v3.0, dated 7 February 2018) and supplementary letter (ref: 610.17382-L01-V0.2, dated 17 December 2018), containing the noise assessment criteria, maximum allowable noise limits of the noise sources associated with the venue, and mitigation strategies to limit noise emission.

Noise emission resulting from the use of mechanical plant was assessed in accordance with the *NSW Industrial Noise Policy (2000)*. While this policy has been replaced by the *Noise Policy for Industry (2017)*, Acoustic Dynamics advises that the method in obtaining the noise criteria for the project has not changed significantly.

Table 3.1 Measured External Noise Levels and Project Noise Objectives – Residential Receivers (INP)

Location	Assessment Period	LA90 Rating Background Noise Level (RBL) [dB]	Measured LAeq Noise Level [dB]	Project Intrusiveness Noise Level LAeq,15min [dB]	Acceptable Amenity Noise Level LAeq [dB] ²		Project Noise Trigger Level LAeq,15min [dB]
					Acceptable	Maximum	
Nearest Residential Receivers	Night (10pm to 7am ¹)	50	58	55	45	50	50

Note: 1) 8:00am on Sundays and public holidays.

2) Acoustic Dynamics notes that the amenity criterion has been assessed in accordance with the NSW Industrial Noise Policy 2000 (EPA), where acceptable and maximum noise limits have been provided.

Acoustic Dynamics notes that details relating to the mechanical equipment were not known at the time of which SLR's SSDA Noise Assessment Report was issued. However, SLR has recommended a maximum allowable sound power level for all mechanical plant located on the rooftop area.

Further, Acoustic Dynamics notes that a Mechanical Noise Emission Assessment (ref: 4196R002.LM.240619, dated 19 June 2024) was completed for the premises, as part of obtaining Construction Certificate. The assessment was completed in accordance with the EPA's *Noise Policy for Industry* (2017).

Within SLR's report, noise emission resulting from the use of the rooftop bar was assessed in accordance with the criteria established by Liquor and Gaming NSW. The following table presents the octave band noise logger measurements and noise limits established by SLR:

Table 3.2 Project External Octave Band Noise Emission Objectives (Liquor and Gaming NSW)

Location	Assessment Period	Method for Calculation of Criteria	Relevant L _{A10} External Noise Emission Criteria [dB]									
			Octave Band Centre Frequency [Hz]									
			32	63	125	250	500	1K	2K	4K	8K	O/A
Nearest Residential Receivers ¹	Day to Late Evening (7am to Midnight)	External L _{A90}	24	35	43	46	50	52	48	40	28	56
		(L _{A90} + 5 dB) ²	29	40	48	51	55	57	53	45	33	61
	Night (Midnight to 7am)	External L _{A90}	14	26	34	41	44	46	43	36	26	50
		(L _{A90} + 0 dB) ³	14	26	34	41	44	46	43	36	26	50

Noise emission resulting from the operation of the venue has been assessed to the potentially most affective point at the adjacent receiver properties and presented below.

Table 3.3 Nearest Sensitive Receiver Locations

Source	Location	Direction
Residential Receivers		
R ₁	44 Cumberland Street	West
R ₂	8 Hickson Road	North
Commercial Receivers		
B ₁	66-84 George Street	East
B ₂	29 George Street	South

SLR has presented the maximum allowable sound power level associated with the rooftop operations, as reproduced in the table below. It has been stated that these maximum allowable values "will allow the venue to operate with up to 70 people in the outdoor terrace area and up to 100 people in the partially-enclosed area with the east-facing doors opened or closed."

Table 3.4 Maximum Allowable Noise Levels from the Venue – 10:00am - Midnight

Noise Source	Maximum Venue L _{A10} Noise Levels [dB]									
	Octave Band Centre Frequency [Hz]									
	32	63	125	250	500	1K	2K	4K	8K	O/A
Rooftop Operations	61	74	84	89	93	95	89	81	71	99

Further, maximum noise limits of the music, supplied by the sound system speakers, have been reproduced in the table below.

Table 3.5 Maximum Allowable Noise Levels for Sound System – Three Speakers

Noise Level Descriptor L _{A10} [dB]	Maximum Venue L _{A10} Noise Levels [dB]									
	Octave Band Centre Frequency [Hz]									
	32	63	125	250	500	1K	2K	4K	8K	O/A
SWL ¹	57	68	76	77	80	82	78	70	58	86
SPL ¹ at 1m	46	57	65	66	69	71	67	59	47	75

Note 1) SLR notes that “the difference between the sound power level (SWL) and the sound pressure level (SPL) at 1m can vary depending on loudspeaker location / room arrangement.” Accordingly, the final setting of the SPL should be confirmed by an acoustical consultant.

Whilst the assessment was completed with the assumption that three speakers will be used, SLR have provided adjustment values, should a different number of speakers be included. These have been reproduced in the table below.

Table 3.6 Octave Band Spectral Adjustment for Number of Speakers

Number of Speakers in Sound System	Adjustment Added to Maximum Noise Level, dBA									
	Octave Band Centre Frequency (Hz)									
	32	63	125	250	500	1K	2K	4K	8K	
1	+5	+5	+5	+5	+5	+5	+5	+5	+5	
2	+2	+2	+2	+2	+2	+2	+2	+2	+2	
3	0	0	0	0	0	0	0	0	0	
4	-1	-1	-1	-1	-1	-1	-1	-1	-1	
5	-2	-2	-2	-2	-2	-2	-2	-2	-2	
6	-3	-3	-3	-3	-3	-3	-3	-3	-3	

Note has been made that the music may be provided to the partially-enclosed area only, i.e., music must not be supplied to the outdoor portion of the rooftop bar.

4 OPERATIONAL AND NOISE VIBRATION MANAGEMENT PLAN

Acoustic Dynamics recommends the following measures to be implemented to minimise and manage noise and vibration within the Operational Noise and Vibration Management Plan, to protect the acoustic amenity of the surrounding area.

A copy of the PoM shall be maintained by the Manager/Licensee and accessible to all senior management staff. All site staff shall be briefed on the relevant sections of the PoM during their induction to the company, including the explanation of noise and vibration control and a discussion of the specific noise reduction strategies. It shall be the duty of the Manager/Licensee to ensure all operational management strategies and procedures are complied with.

The PoM shall outline policies and procedures to ensure noise emission from the premises are kept to a minimum, including:

1. The trading hours of the premises shall remain consistent with the hours of operation contained within the development consent granted by Council. The following area-specific management measures shall also be implemented within the approved trading hours:

Table 4.1 Hours of Operation

Time	Operations
Monday to Sunday	
10:00am until midnight	Indoor areas open
10:00am until 10:00pm	Outdoor areas open
Midnight until 10:00am	Premises closed
New Year's Eve and New Year's Day	
10:00am until 2:00am	Indoor areas open
10:00am until 1:30am	Outdoor areas open
2:00am until 10:00am	Premises closed

2. The number of persons permitted within the rooftop area shall not exceed a total maximum of 150 persons at any one time, as given within the development consent granted by Council. Further, the maximum number of persons within each area of the rooftop bar must not exceed the following limits, as per the table below:

Table 4.2 Patron Capacity

Patron Type	Capacity
Maximum Capacity in Rooftop Area (at any time)	150
Maximum Capacity in Indoor Rooftop Area	100
Maximum Capacity in Outdoor Rooftop Area	70

3. Heavy vehicle movements and deliveries must be received during day-time operational hours only. Should heavy vehicles be required to be on-site for longer than five minutes, engines should be switched off for the duration;
4. Where feasible, consider reducing the operations of mechanical equipment at night by:
 - Reducing the operational capacity of mechanical equipment;
 - Scheduling the use of noisy equipment to the least-sensitive time of day; or
 - Schedule noisy pieces of equipment such that they are used separately rather than concurrently;
5. Mechanical equipment should be regularly maintained to low mechanical noise emission levels;
6. All operable windows and doors, including the east-facing doors on the rooftop bar, shall be closed between 12:00am and 7:00am to contain noise within the premises;
7. For the post-midnight period (i.e. between 12:00am and 7:00am), music is not allowed to be played in the rooftop area;
8. At the cessation of trade, ensure staff and patrons leave the premises quietly and respectfully to minimise any potential impacts on the surrounding amenity, including signage reminding staff and patrons to be aware of their neighbours and to leave in a respectful manner;
9. Staff are to be trained in appropriate setup and pack-down procedures, including, but not limited to no playing of music, exercising care when stacking tables and chairs, filling ice buckets, cleaning, moving stock and cleaning, to ensure that excessive noise is not generated from those activities;
10. Noise generating activities such as rubbish disposal and placing empty glass bottles in waste bins shall be conducted during the day time trading hours only; and
11. Implementation of an appropriate community liaison procedure, including a noise and vibration complaint procedure and means of ongoing communication with nearby potentially affected receivers once development operations begin.

5 CONCLUSION

Acoustic Dynamics has prepared an Operational Noise and Vibration Management Plan associated with the operations and use of the Mercantile Hotel located at 25-27 George Street, The Rocks, NSW.

This certification has been prepared in accordance with the requirements of:

- (a) City of Sydney Council;
- (b) Liquor and Gaming NSW;
- (c) NSW Department of Planning and Environment (DPE);
- (d) NSW Environment Protection Authority (EPA);
- (e) Association of Australasian Acoustical Consultants (AAAC); and
- (f) Australian Standards.

Acoustical Opinion

Further to our review of the relevant acoustic criteria and requirements, Acoustic Dynamics advises that with the incorporation of our recommendations detailed in Section 4, the ongoing use and operations associated with the venue can be adequately managed to comply with the relevant acoustic design requirements of City of Sydney Council, the NSW OLG, NSW DPE, NSW EPA, Australian Standards and all other relevant acoustic criteria and guidelines previously outlined within our letter.

It is our opinion that the acoustic risks associated with the ongoing use and operations of the venue can be adequately controlled and the amenity of neighbouring properties and residents can be satisfactorily protected.

We trust this meets with your immediate requirements. Should you require any further information, please do not hesitate to contact us.

Kind Regards

ACOUSTIC DYNAMICS



ARKAR LWIN

Project Consultant, BE(Mech)(Hons)

Document	Rev	Date	Prepared	Reviewed	Authorised	Approved
4196L006.AL.251030	0	19 November 2025	AL	RH	RH	RH
4196L006.AL.251208	1	8 December 2025	AL	JC	RH	RH
4196L006.AL.251215	2	16 December 2025	AL	RH	RH	