SUNCORP STADIUM

Post Event Report

Red Hot Chili Peppers

With Post Malone

29 January 2023

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Event Overview

Suncorp Stadium hosted the Red Hot Chili Peppers with Post Malone concert on 29 January 2023.

Detailed planning was undertaken to identify and minimise potential adverse impacts on the local community in accordance with the Major Sports Facilities Regulation 2014 for Special Events and the updated Major Sports Facilities Act 2001 (updated 31 October 2022)

A specific Operational and Transport & Traffic Management Plan was developed for the concert and presented to the Stadium Management Advisory Committee (SMAC), Transport Coordination Group (TCG) and Stadiums Queensland as required in the Regulations.

A dedicated Call Centre was established for the concert periods to enable the general public to contact the Stadium on any issues arising either during the bump-in, bump-out periods and during the concert itself. A local community letterbox drop was also conducted to provide residents and local businesses within the Lang Park Traffic Area with relevant information pertaining to the events.

Key deliverables for the concerts were:

Attendance	29 January 2023 46,935
Complaints/ Compliments	Patron feedback from the concert was received. There were compliments received through direct messages on social media and 9 complaints regarding issues getting in and out of the venue.
Media	Due to the two main acts, there were media reports on congestion on the plazas for entry as a large number of patrons arrived just before Post Malone took to the stage. This congestion created some negative press about people delayed in entering the venue.
Social Media/Website	The Stadium website and social media platforms were used to communicate important event information. All incoming messages were monitored, and questions answered where necessary. Patron feedback from the concert was received. The venue received over 4000 positive reactions and over 500 positive comments across social media posts following the concert.
Crowd Management	The crowd overall was extremely compliant and well behaved.
Security	There were 5 Arrests, 24 Evictions for Behaviour and Intoxication, and 2 Notices to appear. Wanding and 100% bag searches were conducted at all gates.
Noise Monitoring	The Stadium's noise consultant, Stantec advised that internal Stadium criteria was complied with at all times during the concert and sound checks. There were also no exceedances in the external locations. Externally, Stantec deployed staff to locations around the Stadium for testing and all levels complied with the legislation. ***(Attachment B)***

Operations

2.1 Attendance and Ticketing

2.1.1. Concert Programme

The concert running times were as follows:

Public Entry Gates A, B, D & E	5:04pm
Main Act Commenced	8:28pm
Main Act Concluded	10:11pm

2.1.2. Tickets Sold

Field – Standing	15,110
Grandstand Seating	32,765
Corporate Seating	855
Total Sales	**48,730**

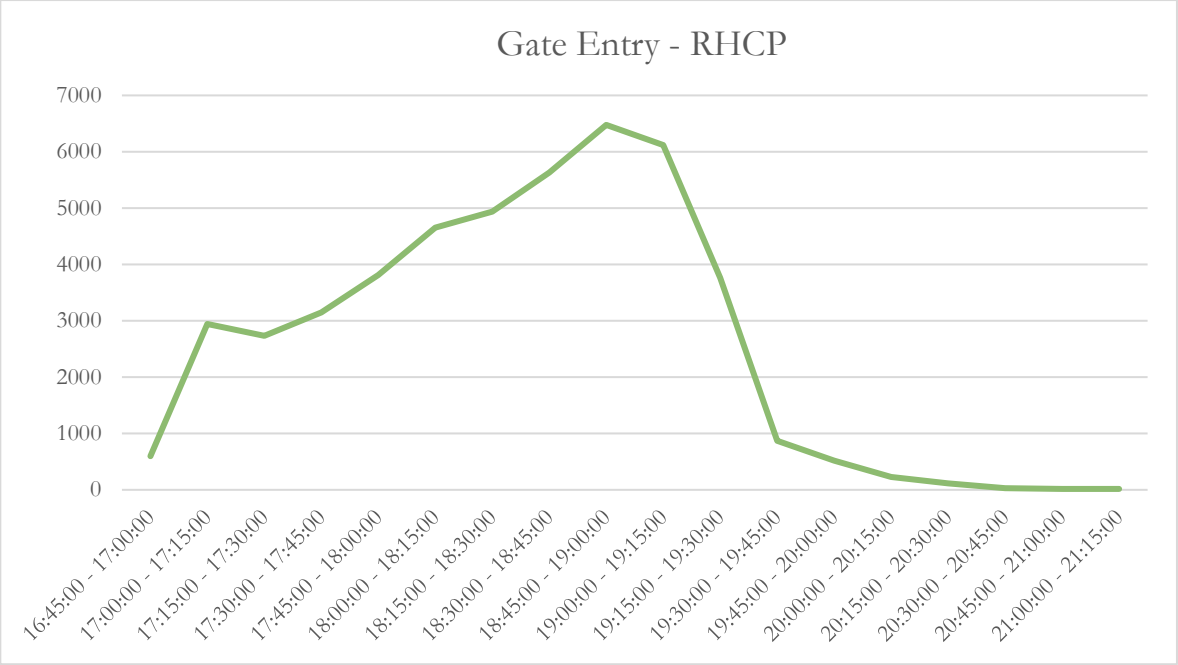
TOTAL ATTENDANCE: 46,935

**There were 1,795 no shows*

2.1.3. Turnstile and Gate Activity

GATE	NUMBER	% PATRONS	OPEN TIME PRIOR TO MAIN ACT
Gate A	11,448	24%	3.5hrs
Gate B	12,198	26%	3.5hrs
Gate C	4,613	10%	3.5hrs
Gate D	7,636	16%	3.5hrs
Gate E	6,060	13%	3.5hrs
Hand Scanners	4,980	11%	3.5hrs
TOTALS	**46,935**	**100%**	

There was a significant disproportionate entry of patrons entering through the southern plaza which created congestion. Security, Staff and police were sent to divert people to the north however a majority of these requests were ignored by patrons. Staff were also positioned at the northern end to divert patrons through Gates C, D & E however many chose not to follow direction.



2.1.4. Passouts

A passout system operated for patrons wishing to smoke.

2.1.5. Stadium Members

As these concerts were not included in their annual entitlement, Stadium Members were provided with a priority opportunity to purchase tickets. Life Ground Members utilized their seats for the concerts.

2.2 Local Residents Management

2.2.1. Call Centre Operations

The Stadium established a Concert Hotline for local residents and businesses. The Hotline was manned by trained Stadium staff during the following times:

Sunday 28 January 2023	0900 – 2030
Monday 29 January 2023	0900 – 2330

To assist with major complaints or issues, Call Centre operators had direct access to the Stadium's main control room and management team to obtain specific advice.

The general Stadium number (07 3331 5000) was also operational during normal business hours as was the Stadium Security number (07 3331 5168) after hours. All calls logged by Call Centre operators were responded to by a return call from Stadium staff immediately.

2.2.2. Concert Hotline Report

There were a total of 14 complaints during the evening, mainly associated with delays for ingress/egress as well as some complaints on some staffing issues. No complaints received around noise. Readings at locations were compliant.

2.3 Noise Management

Stantec conducted initial modelling to assist with the noise control measures during planning for the concert.

As part of this process, Stantec monitored noise levels at 15 minute intervals from inside the Stadium at the mixing console which was located approximately 50 metres from the front of house loudspeakers. External noise monitoring was also conducted at the following locations as required by the Major Sports Facilities Regulation 2014:

- 8 / 5 Petrie Terrace, Brisbane
- 15 Plunkett Street, Paddington
- 36 Judge Street, Brisbane
- 26 Princess Street, Brisbane*
- 31 Isaac Street, Milton

*Monitoring was conducted at 28 Princess Street due to the property not available for logger placement for this concert.

Stantec measured noise in compliance with the Environmental Protection Agency's Noise Measurement Manual. During the events (including rehearsal and sound test), the Stadium ensured that one of its employees or contractors:

(a) was present at the sound mixing desk (or in direct communication with the Sound Engineer for the event and was able to exercise ultimate control on the noise levels from the sound amplification equipment;

(b) could conduct and communicate with all of the acoustic consultants conducting the monitoring of the noise levels from the events; and

(c) was able to report sound levels to Stadium Management at all times

2.4 Issues Management

2.4.1. Noise Levels

Noise monitoring was carried out at the five residential sites surrounding the Stadium as specified in Clause 7 of the MSFA Regulation and at the mixing console located within the Stadium bowl.

The MSFA Regulation requires that noise monitoring is carried out in accordance with the Queensland Government Environmental Protection (Noise) Policy 1997 (EPP Noise). Therefore the results of the noise monitoring analysis have been compared with the noise emission criteria specified schedule 3A "Acoustic Quality Compliance for Special Events" from this policy.

Stantec noted that the internal Stadium criteria was complied with throughout the concert and during sound checks.

There were no exceedances at the external monitoring points. There were a number of complaints received by local residents however measurements taken at the Paddington and Milton locations were significantly less than the external criteria of 70dB(A). Some complaints were received from further afield in Milton and Taringa however, given the measurements closer to the stadium were compliant, it is not possible for the sound to be louder further away.

Stantec's detailed report from this event is outlined within this report. ***(Attachment B)***

2.4.2. Limousine and Parking

Limousine parking in Parkview and Mayneview Streets was monitored closely and in line with the usual arrangements for other major Stadium events. Barriers and Security guards were located at either end of Blaxland Street to ensure it was not used for drop-offs and pickups and Queensland Police were present in the street post-event to control noise and patron behavior. Limousine take-up for this event was very low.

A total of 25 parking infringement notices were issued during the three events.

2.4.3. Taxis

Taxis were in high demand after the concert. Staff suggested to patrons to utilize the regular public transport services or head towards the city to catch rides however many chose to remain and wait.

The venue will continue to work with QPS and Security to protect the integrity of the Traffic and Transport Plans which are designed to minimize traffic in the area for the benefit of local residents and the dispersal of patrons. This includes continuing to manage the access of ride sharing services.

2.4.4. Patron Behaviour Post Event

The Suncorp Stadium Traffic Plan was implemented post-concert, ensuring patrons travelled safely to major transportation hubs and other destinations.

Queensland Police and Traffic Control officers were present during these periods to monitor patron behavior and flow to surrounding areas. The Queensland Police also monitored local areas for one hour post-event and were on standby to be dispatched to locations should complaints arise.

There were no patron behavior issues reported after the concert.

2.5 Additional Patron Services

The following requirements were identified and implemented:

- Specific pathways created to enable patrons to move onto and off the field of play area
- Additional catering and toilet facilities provided to cater for patrons in the nearby carpark
- EFTPOS facilities provided in the carpark to ensure patrons didn't have to return to the concourse
- Additional merchandise locations installed around the main concourse to deal with the demand for concert merchandise
- Facilities outside the Stadium for patrons arriving early and for any parents waiting for children after the concert

2.6 Event Staffing

Casual Event staff	258
Security – Stadium & Traffic	301
Security – Catering	21
Venue Presentation	28
Queensland Police – Internal	27
Queensland Police – External	32
Casual Event Staff Absentees	2%

2.7 Traffic and Transport

The integrated Transport System operated for this event with services running for three hours prior to the main act. As normal, patronage on public transport services was extremely high, but clearance was achieved within one hour of the conclusion of the concert.

2.8 Safety and Risk Management

The Stadium applied its standard Risk Management procedures to all aspects of the concert and prepared contingency plans on additional risks associated with the specific nature of the concert

involving emergency field evacuation and severe weather. As each concert is different, plans are revised based on the stage layout. Neither plan needed to be activated.

2.9 Queensland Police and Security

Given the audience demographic, the crowd was extremely compliant and positive throughout the concert. Additional Queensland Police and Security staff were deployed to support Stadium Staff with ushering and crowd control.

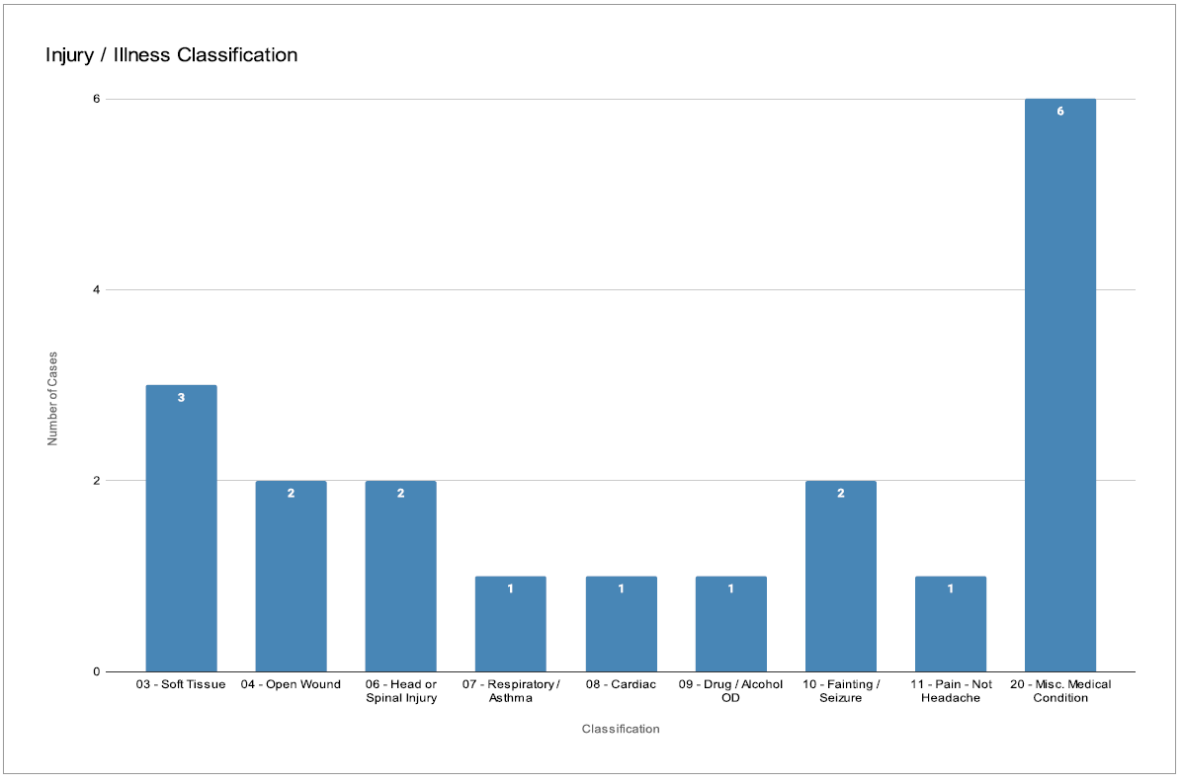
Based on standard Stadium practice, 100% bag searches were implemented for this event. Random wanding was also conducted.

This was also extended to staff entry points. No suspicious items were located. This was implemented with QPS staff on hand to assist where needed.

Evictions	24
Liquor Offences	0
Arrests	5
Field/Stage invasions	0
Refusals of Entry	2
Smoking fines	0
Lost children	0
Theft	0

2.10 Medical and First Aid

A full contingent of First Aid Personnel was on duty for this event.


Injury / Illness Classification
Number of Cases
0
2
4
6
3
2
2
1
1
1
2
1
6
03 - Soft Tissue
04 - Open Wound
06 - Head or Spinal Injury
07 - Respiratory / Asthma
08 - Cardiac
09 - Drug / Alcohol OD
10 - Fainting / Seizure
11 - Pain - Not Headache
20 - Misc. Medical Condition
Classification

ATTACHMENT A – Patron and Corporate Feedback

COMPLIMENTS

3	Overall Experience
1	Staff

COMPLAINTS

A summary of more specific complaints are below:

1	Ticketing/Seating
5	Crowd Management
1	Miscellaneous
2	Patron Behaviour
1	Security
1	Discrimination
1	PWD Services

ATTACHMENT B – Stantec Noise Monitoring Report

Noise Monitoring Report

Suncorp Stadium
Red Hot Chilli Peppers Concert, January 2023

L047_304500811

Prepared for
ASM Global (Brisbane) Pty Ltd

31 January 2023

Stantec

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01	31/01/2023	DRAFT	Liam McDonagh	Julie McDonagh

Executive Summary

This report summarises the results of noise monitoring carried out during the Red Hot Chilli Peppers Concert on 29 January 2023 at Suncorp Stadium, in accordance with Clause 8 of the Major Sports Facilities Authority (MSFA) Amendment Regulation (No.1) 2006, under the Sports Facilities Act 2001.

Noise monitoring was carried out at the five residential sites surrounding the stadium as specified in Clause 7 of the MSFA Regulation and at the mixing console located within the stadium bowl.

The MSFA Regulation requires that noise monitoring is carried out in accordance with the Queensland Government Environmental Protection (Noise) Policy 1997 (EPP Noise). Note that subsequent revisions of the EPP Noise do not affect the requirements of the MSFA Regulation. Therefore, the results of the noise monitoring analysis have been compared with the noise emission criteria specified schedule 3A "Acoustic Quality Compliance for Special Events" from this policy.

The analysis has found that the internal stadium criterion was complied with throughout the concert and sound checks for all time periods.

Measured noise levels associated with the sound checks and concerts complied with the EPA "Special Events" external noise criteria of LAeq,15min 70 dB(A) at all the nominated external monitoring locations throughout the sound checks and the concerts for all time periods.

It was noted that there were light north / north easterly wind conditions, during the line, sound checks and concert which are likely to have influenced the noise emissions from the stadium to sound louder than usual to the south and southwest of the stadium.

We understand that there were two noise complaints from 26 Gordon Street, Milton and 60 Rogers Street, West End recorded during the concert period. Whilst the concert was clearly audible at the Gordon Street location, noise measurements indicated that the measured level (47 dB(A)) was significantly less than the external criteria of 70 dB(A).

It was not possible to access the 60 Rogers Street location in West End to obtain a noise measurement during the concert. However, as this location was noted to be 2.2 km from the stadium in the same direction as 26 Gordon Street, the noise level from the stadium would have been quieter than 47 dB(A) at this location.

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Glossary of Terms

A-weighted Level	As per dB(A) defined below.
Ambient Sound	Of an environment: the all-encompassing sound associated with that environment, being a composite of sounds from many sources, near and far.
Background Sound Level	The average of the lowest levels of the sound levels measured in an affected area in the absence of noise from occupants and from unwanted external ambient noise sources.
Decibel, dB	Unit of acoustic measurement. Measurements of power, pressure and intensity may be expressed in dB relative to standard reference levels.
L_{90}, L_{10} etc.	A statistical measurement giving the sound pressure level which is exceeded for the given percentile of an observation period, i.e., L_{90} is the level which is exceeded for 90 percent of an observation period. L_{90} is commonly referred to as a basis for measuring the background sound level.
$L_{Abg,T}$	The A-weighted background sound level measured over a time interval T.
$L_{Aeq,T}$	Equivalent continuous A-weighted sound pressure level. This is 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.
Sound Pressure Level, Lp, dB, of a sound	A measurement obtained directly obtained using a microphone and sound level meter. Sound pressure level varies with distance from a source and with changes to the measuring environment. Sound pressure level equals 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 microPascals.
Sound Power Level, Lw, dB of a source	Sound power level is a measure of the sound energy emitted by a source, does not change with distance, and cannot be directly measured. Sound power level of a machine may vary depending on the actual operating load and is calculated from sound pressure level measurements with appropriate corrections for distance and/or environmental conditions. Sound power level is equal to 10 times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power of 1 picoWatt.

1 Referenced Documents

The following documents have been referenced as part of the assessment:

- *"MSFA Amendment Regulation (No.1) 2006" – Queensland Government.*
- *Environmental Protection and Other Legislation Amendment Act (No. 2) 2008 (EPOLA No. 2)*
- *"Environmental Protection (Noise) Amendment Policy 1997" (Reprint No.3) as part of the Environmental Protection Act 1994 – Queensland Environmental Protection Agency.*
- *"Suncorp Stadium, State of Origin 2003 - Noise Impact Assessment Report" – Hyder Consulting*
- *"Suncorp Stadium, Robbie Williams Concert - Noise Impact Assessment Report" – Hyder Consulting*
- *"Suncorp Stadium, The Police Concert - Noise Impact Assessment Report" – Hyder Consulting*
- *"Suncorp Stadium, Andre Rieu Concert – Noise Impact Assessment Report" – Hyder Consulting*
- *"Suncorp Stadium, U2 Concert – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Bon Jovi Concert – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Justin Bieber Concert – Noise Monitoring Report" - Cardno.*
- *"Suncorp Stadium, Worlds Biggest Orchestra World Record Attempt – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Taylor Swift Concert 2013 – Noise Monitoring Report" - Cardno).*
- *"Suncorp Stadium, Bon Jovi Concert 2013 – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Eminem Concert 2014 – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, One Direction Concert 2015 – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Foo Fighters Concert 2015 – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Ed Sheeran Concert 2015 – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Taylor Swift Concert 2015 – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Coldplay Concert 2016 – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Justin Bieber Concert March 2017 – Noise Monitoring Report" - Cardno*
- *"Suncorp Stadium, Paul McCartney Concert December 2017 – Noise Monitoring Report" - Cardno*
- *Suncorp Stadium, Foo Fighters Concert January 2018 – Noise Monitoring Report" - Cardno*
- *Suncorp Stadium, Ed Sheeran Concerts March 2018 – Noise Monitoring Report" - Cardno*
- *Suncorp Stadium, Bon Jovi Concert December 2018 – Noise Monitoring Report" - Cardno*
- *Suncorp Stadium, Phil Collins Concert January 2019 – Noise Monitoring Report" - Cardno*
- *Suncorp Stadium, U2 Concert November 2019 – Noise Monitoring Report" - Cardno*
- *Suncorp Stadium, Queen Concert February 2020 – Noise Monitoring Report" - Cardno*
- *Suncorp Stadium, Guns 'n' Roses Concert November 2022 – Noise Monitoring Report" – Cardno now Stantec*
- *Suncorp Stadium, Elton John Concert January 2023 – Noise Monitoring Report" –Stantec*

2 Noise Emission Criteria

It should be noted that the EPP (Noise) 1997, which forms part of the EPA 1994, has been superseded by the EPA 2019. However, the Environmental Protection and Other Legislation Amendment Act (No. 2) 2008 (EPOLA No. 2), allows for the previous criteria contained within the EPA 1994 to be retained for special events at Suncorp Stadium, in accordance with the MSFA Regulation (No 1) 2006. Therefore, the following assessment EPA 1994 criteria applies to amplified concert event noise emissions from the Stadium:

1.1 State Government EPA Criteria

The EPA criteria for "Special Events" is as follows:

Schedule 3A - Acoustic quality compliance for special events:

Acoustic quality compliance levels

1) *An acoustic quality compliance level is authorised for a special event if the level is equal to or less than at least 1 of the following*
   a) *100 dB(A) Leq, measured at 15 minute intervals, measured at a point 50m directly in front of the front edge of the performance stage.*
   b) *70 dB(A) Leq, measured at 15 minute intervals, measured at the locations mentioned in the Major Sports Facilities Regulation 2002, schedule 2, section 7(1).*
2) *To remove any doubt, it is declared that subsection (1) is satisfied even if the level measured is greater than 1 of the levels stated in the subsection.*

MSFA Regulation (No 1) 2006

'7 Noise

1) *During the event, including rehearsals and sound tests, the operator must ensure that the noise levels from the event are continuously monitored by a suitably qualified acoustic consultant at, or as near as practicable to, the following locations –*
   - *8.5 Petrie Terrace, City*
   - *15 Plunkett Street, Paddington*
   - *[1]36 Judge Street, City*
   - *[2]26 Princess Street, City*
   - *31 Isaac Street, Milton*
2) *The operator must ensure the taking of the noise measurements complies with the Environmental Protection Agency's Noise Measurement Manual.*
3) *During the event, including rehearsals and sound tests, the Authority must ensure that 1 of its employees or its agent –*
   a) *is present at the sound mixing desk for the event and is able to exercise ultimate control on the noise levels from the sound amplification equipment; and*
   b) *can conduct and communicate with all of the acoustic consultants conducting the monitoring of the noise levels from the event.*

Notes:

(1) The original monitoring location in this area was 105 Hale Street. However, an alternative, nearby location has subsequently been selected. It was found from previous concerts, that 105 Hale Street was not an ideal monitoring site given the high levels of traffic noise incident on the site from Hale

Street. The traffic noise was found to affect the monitored levels, resulting in difficulty in determining compliance. Therefore, 36 Judge Street was selected as being close to the original location but further away from Hale Street, and therefore, less affected by road traffic noise.

(2) Attended monitoring was carried out at this location but unattended noise monitoring was carried out at 28 Princess Street, as access to 26 Princess Street was not available for logger placement for this concert.

3 Noise Monitoring Methodology

3.1 Noise Monitoring Locations

Continuous noise monitoring was conducted within the stadium bowl to determine whether internal noise levels complied with MSFA criteria. External noise monitoring was also conducted at the following locations as required by the MSFA Regulation:

- *8.5 Petrie Terrace*
- *15 Plunkett Street*
- *36 Judge Street*
- *26 Princess Street (Note: unattended monitoring was carried out at 28 Princess Street due to access issues with 26 Princess Street).*
- *31 Isaac Street*

The above external locations relative to the stadium are shown in Appendix A.

Continuous noise monitoring was also conducted within the stadium bowl to provide correlation with external noise levels.

3.2 Monitoring Methodology

The event noise monitoring was conducted to provide a co-ordinated set of noise level data at the five MSFA external locations and inside the stadium. Noise level loggers were installed at locations 1, 2, 3, 4, 5, and inside the stadium bowl at the mixing console, which was located approximately 40 metres from the front of house loudspeakers.

Manual noise measurements were recorded using sound level meters at locations 1 to 5, and inside the stadium, to confirm the results of the noise loggers, identify any extraneous noise sources not associated with stadium noise emissions, and determine whether the criteria were being exceeded inside or outside the stadium.

There were line and sound checks and one concert providing intermittent audible noise emissions externally between 11:45 and 22:00 on 29 January 2023. Unattended noise monitoring was also carried out on the day before the concert to record representative daytime and evening ambient noise levels without any noise emissions from the stadium. These measurements recorded on 28 January have been included below for information.

The general schedule was as follows:

Sunday, 29 January 2023

12:00 to 12:45	Red Hot Chilli Peppers line & sound checks
14:00 to 14:45	Post Malone line checks / concert volume music through the PA.
18:45 to 19:50	Post Malone
20:30 to 22:15	Main Act – "Red Hot Chilli Peppers"

3.3 Instrumentation

Appendix B lists the instrumentation used for the noise monitoring. Calibration of all instrumentation was conducted before and after the measurement session with no significant (less than +/- 0.4 dB(A) drift in calibration noted.

All noise logger clocks were synchronised with the noise logger installed in the stadium to ensure a coherent set of measurement data.

1.2 Weather Conditions

Appendix C lists the weather conditions during the measurement session. The weather conditions were fine with no rain. There was a slight breeze on 29 January predominantly from the N & NE during the line, sound checks and concert.

4 Noise Monitoring Results

The results from the noise monitoring for 29 January 2023 are shown graphically in Figure 4-1 to Figure 4-5 below. The charts show the following information:

- Noise levels measured in the stadium in terms of LAeq, 15min, on 29 January or the equivalent continuous noise level during each 15-minute sample period.
- Noise levels at each external location in terms of LAeq, 15min noise levels on 28 & 29 January.
- The LAeq,15 min relevant noise goal.

Figure 4-1 External Noise Measurements - Site 1, 6/8 Petrie Terrace

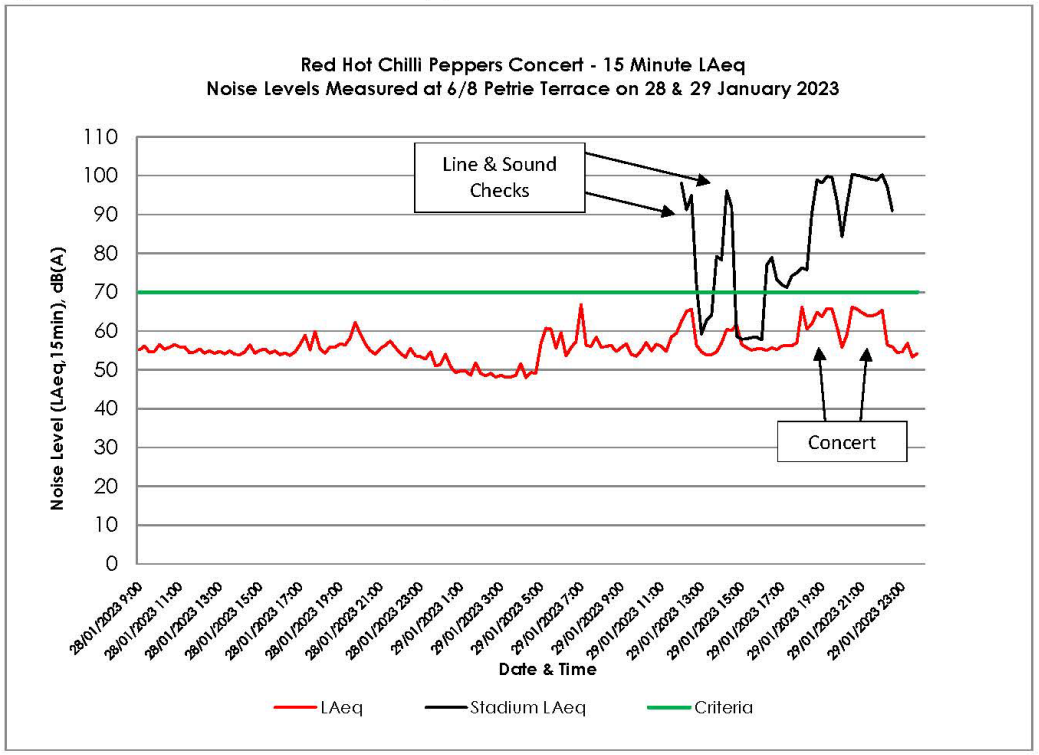


Figure 4-2 External Noise Measurements - Site 2, 15 Plunkett Street

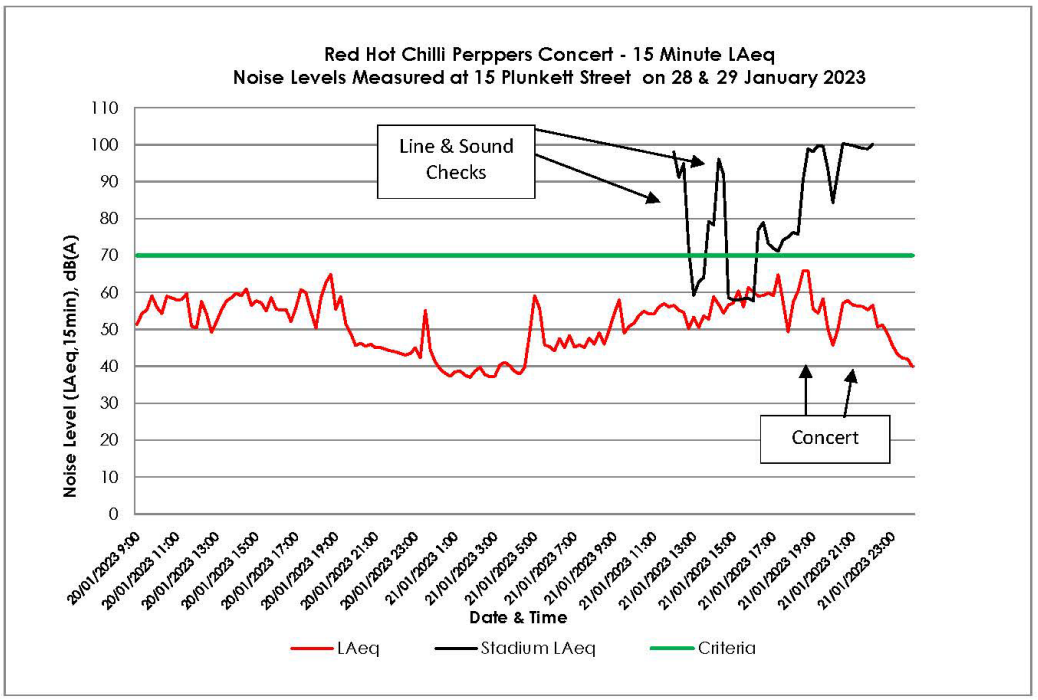


Figure 4-3 External Noise Measurements - Site 3, 36 Judge Street

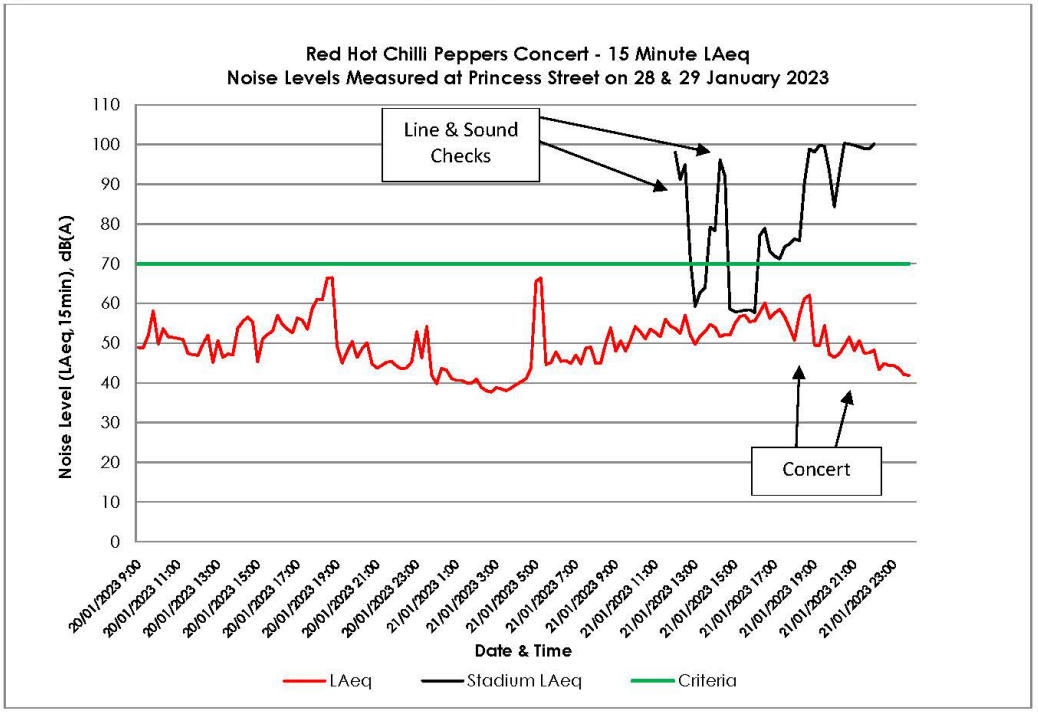


Figure 4-4 External Noise Measurements - Site 3, 28 Princess Street

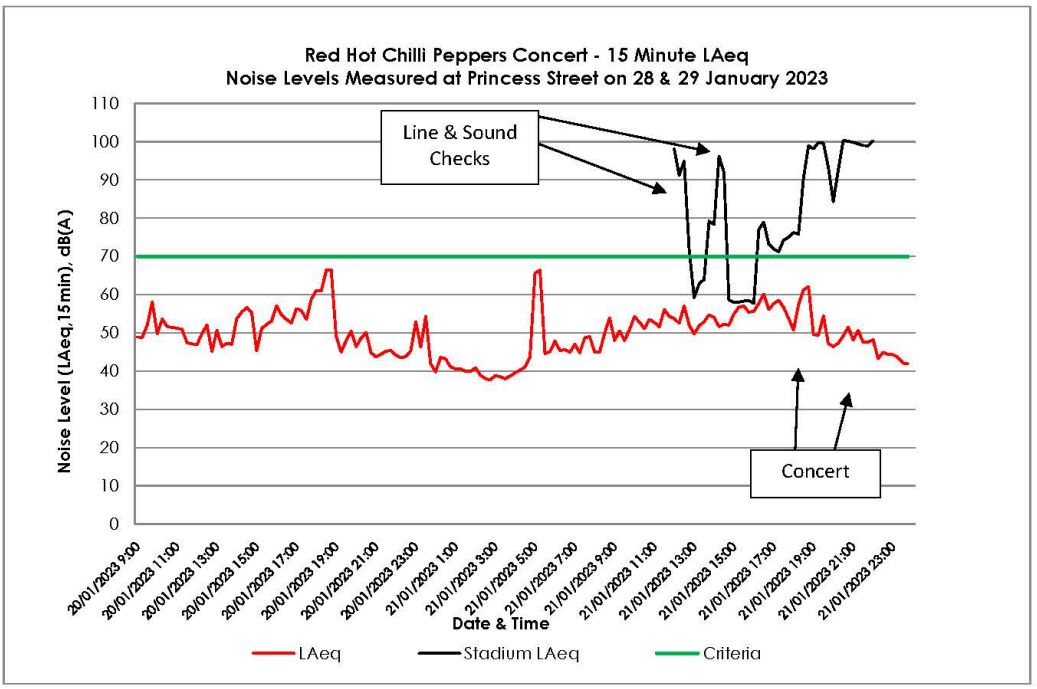
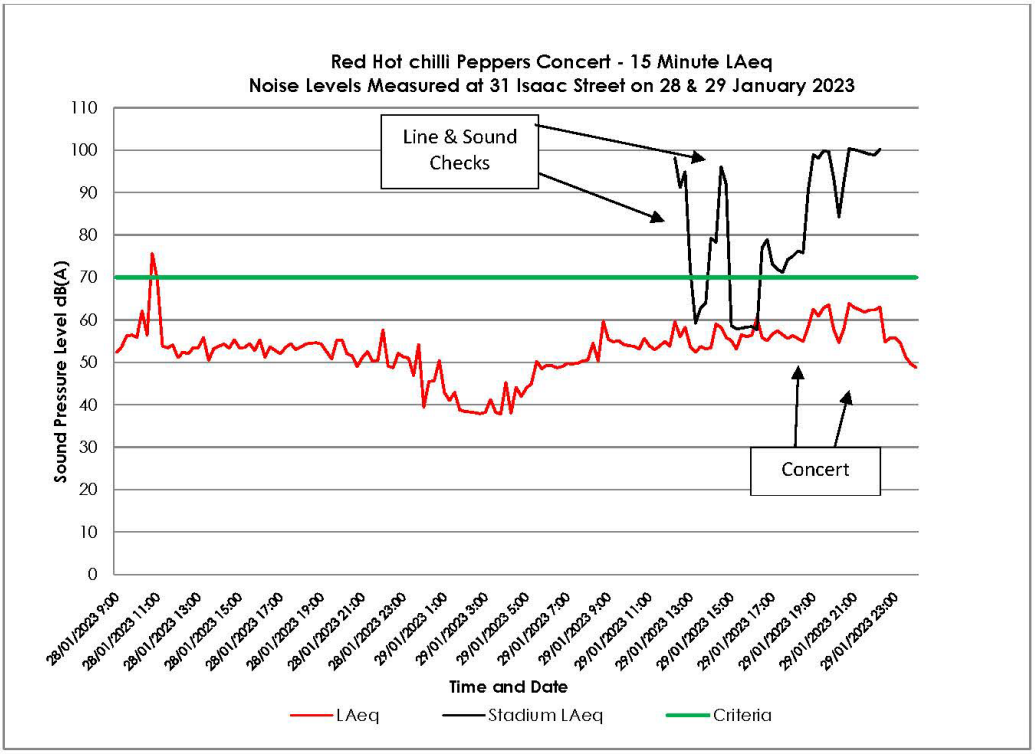


Figure 4-5 External Noise Measurements - Site 3, 31 Isaac Street



The above graphs indicate that the noise levels measured externally were generally independent of the sound check noise levels inside the stadium at Princess and Plunkett Street but dependent on the Stadium noise level at the locations closest to the Stadium (Locations 1, 3 and 5).

The concert was audible at all locations during the line checks and the concert. There were loud levels of ambient noise noted at some of the locations that included mechanical plant, helicopters, residential occupancy noise and local traffic, which were not associated with noise emissions from the stadium, particularly at Princess and Isaac Street.

It was noted that there were light to moderate north / north easterly wind conditions, during the day of the concert. This may have slightly increased the noise emissions from the stadium to the southwest and south of the stadium during the sound checks and concert.

The unattended measurements recorded were observed to vary considerably as can be seen in Figure 4-1 to Figure 4-5. This was generally observed to be due to a combination of concert and ambient noise, during the soundchecks and the concert, at the locations closest to the stadium. Additional ambient conditions that could have potentially affected the external noise measurements were noted at each site and are detailed below in Table 1-1.

Table 1-1 Summary of External Site Measurement Conditions

Site		Measurement Conditions
1	8.5 Petrie Tce	Road traffic on Petrie Terrace and Hale Street was the primary sources of ambient noise during the day. Crowd noise from the stadium and the concert and sound checks (primarily guitar, drums and vocals) were clearly audible during the concert and were the primary source of noise once the roads in the surrounding area had been closed.

Site		Measurement Conditions
2	15 Plunkett St	Concert clearly audible but low level. Vocals were faintly audible during the sound check and clearly audible during the concert. Crowd was audible. Ambient noise consisted of regular traffic pass-bys on Dowse Street and local road traffic on Plunkett Street. Bats and distant traffic on Given Terrace was the main source on noise in the absence of local traffic.
3	36 Judge St	Concert and sound checks were clearly audible at this location. Distant hum of traffic from Hale Street and Caxton Street, and car pass-bys on Judge Street were the main noise sources in addition to concert noise from the stadium. Some continuous plant noise from nearby licensed premises was also continuously audible throughout the monitoring period.
4	26 Princess St	Concert was inaudible during the line checking period. During the concert, concert and crowd noise were faintly audible. Primary source of noise at this location was distant traffic noise and car pass-bys on Princess Street.
5	31 Isaac St	Concert and sound checks were clearly audible at this location. Concert noise was the main source of noise during the concert. Road traffic noise on Isaac Street was the main source of noise during the day along with one or two aircraft / helicopter flyovers during the sound check.

5 Analysis

Table 1-2 summarises the unattended measured (logger) LAeq, 15min noise levels for the line checks and concert. Measurements were recorded at all times during the line checks and concert when music was audible outside the Stadium.

The LAeq, 15min event noise levels reported below in Table 1-2 are based on an analysis of the noise logger data measured at the monitoring locations. Supplementary manual measurements were also carried out at these locations (0) and generally agreed with those recorded by the loggers.

Table 1-2 Continuous Logger LAeq,15min Noise Levels, 29 January 2023, Line & Sound Checks & Concert

Date	Time (recorded Previous 15 Minutes)	Sound Checks & Concert					
		Inside Stadium	8.5 Petrie Terrace	15 Plunkett Street	36 Judge Street	26 Princess Street	31 Isaac Street
Criteria		**100**	**70**	**70**	**70**	**70**	**70**
21/01/2023	12:15	98	63	57	60	54	60
21/01/2023	12:30	91	65	55	56	53	56
21/01/2023	12:45	95	66	55	61	57	58
21/01/2023	13:00	72	56	50	55	52	54
21/01/2023	13:15	59	55	53	56	50	52
21/01/2023	13:30	63	54	51	53	52	54
21/01/2023	13:45	64	54	54	53	53	53
21/01/2023	14:00	79	55	53	56	55	53
21/01/2023	14:15	78	57	59	55	54	59
21/01/2023	14:30	96	60	57	59	52	58
21/01/2023	14:45	92	60	54	58	52	56
21/01/2023	15:00	59	62	57	54	52	55
21/01/2023	15:15	58	57	57	56	55	53
21/01/2023	15:30	58	56	60	57	57	57
21/01/2023	15:45	58	55	56	55	57	56
21/01/2023	16:00	58	55	61	56	55	56
21/01/2023	16:15	58	55	60	56	56	61
21/01/2023	16:30	77	55	59	62	58	56
21/01/2023	16:45	79	56	59	60	60	55
21/01/2023	17:00	73	55	60	59	56	57
21/01/2023	17:15	72	56	59	57	58	57
21/01/2023	17:30	71	56	65	58	59	57
21/01/2023	17:45	74	56	57	59	57	56
21/01/2023	18:00	75	57	49	59	54	56
21/01/2023	18:15	76	66	57	59	51	56
21/01/2023	18:30	76	61	60	58	57	55
21/01/2023	18:45	91	62	66	59	61	58
21/01/2023	19:00	99	65	66	63	62	63
21/01/2023	19:15	98	64	56	62	50	61
21/01/2023	19:30	100	66	54	64	49	63
21/01/2023	19:45	100	66	58	64	54	64
21/01/2023	20:00	93	61	50	60	47	58
21/01/2023	20:15	84	56	46	54	46	55
21/01/2023	20:30	93	59	50	58	47	58
21/01/2023	20:45	100	66	57	65	49	64
21/01/2023	21:00	100	66	58	64	52	63
21/01/2023	21:15	100	65	57	63	48	62
21/01/2023	21:30	99	64	56	63	51	62
21/01/2023	21:45	99	64	56	63	48	62
21/01/2023	22:00	99	64	55	63	48	62
21/01/2023	22:15	100	65	57	64	48	63

Table 1-3 Manually Recorded $L_{Aeq,15min}$ Noise Levels, 29 January 2023– Line Checks & Concert

Date	*Time (recorded Previous 15 Minutes)	Sound Checks & Concert					
		Inside Stadium	8.5 Petrie Terrace	15 Plunkett Street	36 Judge Street	**26 Princess Street	31 Isaac Street
Criteria		**100**	**70**	**70**	**70**	**70**	**70**
13/02/2020	12:00	96	-	-	-	-	-
13/02/2020	12:15	93	-	-	-	-	-
13/02/2020	12:30	88	-	-	-	-	-
13/02/2020	12:45	-	-	-	-	-	56
13/02/2020	13:00	-	-	-	58	-	65
13/02/2020	13:15	-	-	-	59	-	54
13/02/2020	13:30	-	-	-	53	-	-
13/02/2020	13:45	-	-	50	54	-	-
13/02/2020	14:00	76	-	52	57	-	-
13/02/2020	14:15	77	-	-	58	-	-
13/02/2020	14:30	95	-	-	60	-	60
13/02/2020	14:45	92	-	-	57	-	57
13/02/2020	15:00	-	-	-	-	-	56
13/02/2020	15:15	-	-	-	-	-	-
13/02/2020	15:30	-	-	-	-	-	-
13/02/2020	15:45	-	-	-	-	-	-
13/02/2020	16:00	-	-	-	-	-	-
13/02/2020	16:15	-	-	-	-	-	-
13/02/2020	16:30	-	-	-	-	-	-
13/02/2020	16:45	-	-	-	-	-	-
13/02/2020	17:00	-	-	-	-	-	-
13/02/2020	17:15	-	-	-	-	-	-
13/02/2020	17:30	69	-	56	-	-	-
13/02/2020	17:45	73	55	56	-	-	-
13/02/2020	18:00	73	55	-	-	-	-
13/02/2020	18:15	76	60	-	-	-	58
13/02/2020	18:30	75	57	-	-	-	56
13/02/2020	18:45	77	59	-	-	-	58
13/02/2020	19:00	97	66	-	-	-	62
13/02/2020	19:15	97	65	-	-	-	60
13/02/2020	19:30	99	-	-	-	-	62
13/02/2020	19:45	99		-	65	-	63
13/02/2020	20:00	97	-	-	56	-	-
13/02/2020	20:15	81	-	-	59	-	-
13/02/2020	20:30	80	-	-	-	-	-
13/02/2020	20:45	98	-	-	66	-	-
13/02/2020	21:00	99	-	54	-	-	-
13/02/2020	21:15	98	66	55	-	-	-
13/02/2020	21:30	97	66	-	-	-	-
13/02/2020	21:45	97	-	-	-	54	61
13/02/2020	22:00	98	-	-	-	52	61
13/02/2020	22:15	99	-	54	-	53	-

Approximate time period for comparison purposes. The 15-minute measurement period was generally within 1-4 minutes of the stated times.

We understand that there were two noise complaints from 26 Gordon Street, Milton and 60 Rogers Street, West End recorded during the concert period. Whilst the concert was clearly audible at the Gordon Street location, noise measurements indicated that the measured level (47 dB(A)) was significantly less than the external criteria of 70 dB(A).

It was not possible to access the 60 Rogers Street location in West End to obtain a noise measurement during the concert. However, as this location was noted to be 2.2 km southwest of

the stadium in the same direction as 26 Gordon Street, the noise level from the stadium would have been quieter than 47 dB(A) at this location.

The above results indicate that all internal measurements recorded within the stadium for the duration of the event, complied with the 100 dB(A) EPA "Special Events" internal LAeq,15 min noise criteria, for all time periods.

Measured noise levels associated with the sound checks and concerts complied with the EPA "Special Events" external noise criteria of LAeq,15min 70 dB(A) at all external locations throughout the sound checks and the concerts for all time periods.

It was noted that there were light to moderate north / north easterly wind conditions, during the line checks and the concert which is likely to have influenced the noise emissions from the stadium to sound louder than usual to the south and southwest of the stadium.

6 Conclusion

Noise emissions were monitored in accordance with the specified MSFA Regulation and EPP (Noise) 1997 requirements.

Concert noise emissions from Suncorp Stadium measured during the Red Hot Chilli Peppers line checks, sound checks and concert on 29 January 2023, indicated compliance with the MSFA Regulation for all the external noise monitoring sites for all time periods.

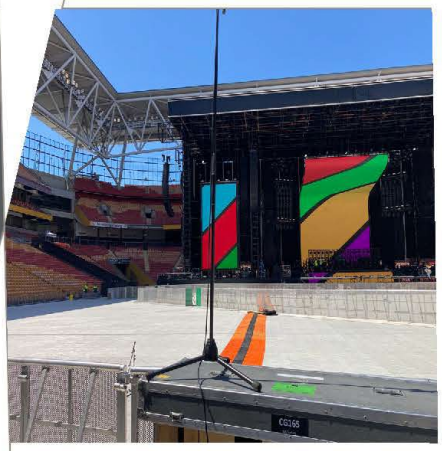
Noise emissions from the Red Hot Chilli Peppers production inside the stadium complied with the internal EPP criteria for the duration of the concert and line checks at the stadium internal monitoring location.

* * * * *

Suncorp Stadium
Red Hot Chilli Peppers
Concert, January 2023

APPENDIX A

EXTERNAL MEASUREMENT LOCATIONS



Stantec

Figure A-1 External Measurement Locations

Suncorp Stadium
Red Hot Chilli Peppers
Concert, January 2023

APPENDIX

B

INSTRUMENTATION

Stantec

Table B1 Instrumentation

Site		Noise Logger	Serial No.	Sound Level Meter	Serial No.
Sound Level Meters & Loggers					
-	Stadium Bowl	Rion NL-21	00365350	Rion NA-28	00101271
1	6/8 Petrie Terrace	Rion NL-21	00509343	Rion NL-21	00276274
2	15 Plunkett Street	Rion NL-21	00877035	Rion NA-28	00101280
3	36 Judge Street	Rion NL-21	00509345	Rion NL-21	00276274
4	26 Princess Street	Rion NL-21	00509346	Rion NL-21	00276274
5	31 Isaac Street	Rion NL-21	00954854	Rion NA-28	00101280
Calibrators					
		Rion NC-74	34504750		
		WCM 94-114	10089825		
		Rion NC73	10692139		

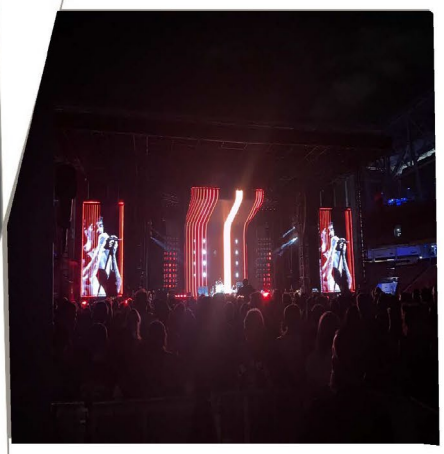
All items- of equipment used for this project hold current NATA Calibration certificates.

Suncorp Stadium
Red Hot Chilli Peppers
Concert, January 2023

APPENDIX

C

DETAILED WEATHER CONDITIONS



Stantec

Weather Conditions – 29 January 2023

Table C1 Brisbane Weather Conditions – Sunday, 29 January 2023

Date & Time	Temp °C	Humidity %	Wind Speed m/s	Wind Direction	Rain 10 min mm
20/01/2023 0:30	23.9	74	2.4	S	0.0
20/01/2023 1:00	22.6	84	0.9	WSW	0.0
20/01/2023 1:30	22.2	88	0.6	N	0.0
28/01/2023 0:30	24.6	87	0.6	SSE	0.0
28/01/2023 1:00	24.3	87	0.2	N	0.0
28/01/2023 1:30	23.7	90	0	N	0.0
28/01/2023 2:00	23.5	93	0.2	SSW	0.0
28/01/2023 2:30	23.8	93	0.7	SSW	0.0
28/01/2023 3:00	23.2	92	0	N	0.0
28/01/2023 3:30	23	94	0	N	0.0
28/01/2023 4:00	22.6	94	0	N	0.0
28/01/2023 4:30	22.6	97	0	N	0.0
28/01/2023 5:00	22.7	98	0.2	SW	0.0
28/01/2023 5:30	22.7	96	0.2	N	0.0
28/01/2023 6:00	22.8	93	0.7	SSW	0.0
28/01/2023 6:30	24.3	89	0	N	0.0
28/01/2023 7:00	25.6	82	0	N	0.0
28/01/2023 7:30	25.9	78	1.3	SW	0.0
28/01/2023 8:00	27.1	74	0.7	SSW	0.0
28/01/2023 8:30	28.2	69	0.6	NNE	0.0
28/01/2023 9:00	28.4	66	1.4	NNE	0.0
28/01/2023 9:30	29.1	64	1.6	NE	0.0
28/01/2023 10:00	30.1	59	1.9	ENE	0.0
28/01/2023 10:30	31	55	1.3	NNE	0.0
28/01/2023 11:00	30.6	54	0.9	E	0.0
28/01/2023 11:30	31.4	50	2	ENE	0.0
28/01/2023 12:00	31.9	51	1.9	E	0.0
28/01/2023 12:30	32.7	49	2.3	NE	0.0
28/01/2023 13:00	32.5	48	3.8	E	0.0
28/01/2023 13:30	31.6	48	4	ENE	0.0
28/01/2023 14:00	30.3	52	3.6	E	0.0
28/01/2023 14:30	28.9	58	2.3	E	0.0
28/01/2023 15:00	28.3	61	2.8	ENE	0.0
28/01/2023 15:30	29.3	64	2.2	ENE	0.0
28/01/2023 16:00	29.8	60	2.5	ENE	0.0
28/01/2023 16:30	30	58	2.5	ENE	0.0
28/01/2023 17:00	29.8	60	2.3	NE	0.0
28/01/2023 17:30	29.1	64	2.3	NE	0.0
28/01/2023 18:00	28.3	66	2.7	ENE	0.0
28/01/2023 18:30	27.5	70	2.2	NE	0.0
28/01/2023 19:00	27.1	73	1.9	NE	0.0

Date & Time	Temp °C	Humidity %	Wind Speed m/s	Wind Direction	Rain 10 min mm
28/01/2023 19:30	26.9	72	1.9	ENE	0.0
28/01/2023 20:00	26.6	72	1.4	NE	0.0
28/01/2023 20:30	26.5	74	1.5	NE	0.0
28/01/2023 21:00	26.4	75	1.9	NE	0.0
28/01/2023 21:30	26.3	75	1.5	NNE	0.0
28/01/2023 22:00	26.1	77	1.3	NNE	0.0
28/01/2023 22:30	25.9	77	1.5	NE	0.0
28/01/2023 23:00	25.8	78	0.9	ENE	0.0
28/01/2023 23:30	26	78	1.3	NE	0.0
29/01/2023 0:00	26	76	1.2	NNE	0.0
29/01/2023 0:30	25.7	79	1.1	N	0.0
29/01/2023 1:00	25.6	81	1.3	NW	0.0
29/01/2023 1:30	25.8	80	1.8	NW	0.0
29/01/2023 2:00	25.6	80	1.3	NNW	0.0
29/01/2023 2:30	25.3	81	1.3	NNW	0.0
29/01/2023 3:00	25.1	81	1.1	NNE	0.0
29/01/2023 3:30	24.8	83	0.4	N	0.0
29/01/2023 4:00	24.9	83	0.7	WNW	0.0
29/01/2023 4:30	25	83	1.1	N	0.0
29/01/2023 5:00	24.6	83	0.9	NW	0.0
29/01/2023 5:30	24.6	82	0.7	N	0.0
29/01/2023 6:00	24.5	84	0.6	WNW	0.0
29/01/2023 6:30	25	82	0.6	W	0.0
29/01/2023 7:00	25.9	76	1.3	W	0.0
29/01/2023 7:30	26.6	71	1.1	WNW	0.0
29/01/2023 8:00	27.4	68	0.9	N	0.0
29/01/2023 8:30	27.7	68	0.7	N	0.0
29/01/2023 9:00	27.3	66	1.1	NW	0.0
29/01/2023 9:30	28.3	65	0.6	SW	0.0
29/01/2023 10:00	29.1	60	1.1	S	0.0
29/01/2023 10:30	29.1	59	0.9	SE	0.0
29/01/2023 11:00	30	56	1.3	NW	0.0
29/01/2023 11:30	29.9	56	1.3	NNW	0.0
29/01/2023 12:00	30.6	54	2	ENE	0.0
29/01/2023 12:30	31.4	55	2.1	ENE	0.0
29/01/2023 13:00	31.2	53	3.2	NNE	0.0
29/01/2023 13:30	31.3	53	2.8	ENE	0.0
29/01/2023 14:00	31.1	52	2.6	NE	0.0
29/01/2023 14:30	31	52	3.1	ENE	0.0
29/01/2023 15:00	30.8	53	3.8	ENE	0.0
29/01/2023 15:30	30.3	54	3.4	NE	0.0
29/01/2023 16:00	29.3	57	2.9	NNE	0.0
29/01/2023 16:30	28.8	61	2.4	NE	0.0

Date & Time	Temp °C	Humidity %	Wind Speed m/s	Wind Direction	Rain 10 min mm
29/01/2023 17:00	28.3	62	2.9	NE	0.0
29/01/2023 17:30	28	63	2.3	NNE	0.0
29/01/2023 18:00	27.6	65	1.7	NE	0.0
29/01/2023 18:30	27.3	67	1.5	NW	0.0
29/01/2023 19:00	26.9	67	2.5	NNE	0.0
29/01/2023 19:30	26.6	68	2.5	NNE	0.0
29/01/2023 20:00	26.4	70	2.4	NNE	0.0
29/01/2023 20:30	26.3	71	1.8	NNE	0.0
29/01/2023 21:00	26.2	71	1.9	NNE	0.0
29/01/2023 21:30	26.1	70	1.2	NE	0.0
29/01/2023 22:00	26	70	1.3	NNE	0.0
29/01/2023 22:30	25.9	71	1.2	NNE	0.0
29/01/2023 23:00	26	71	1.8	NNE	0.0
29/01/2023 23:30	25.9	71	1.3	NE	0.0
30/01/2023 0:00	26.1	71	0.9	NE	0.0