

Sydney Football Stadium Redevelopment Stage 2 Environmental Monitoring Summary – April 2021

**Author: Holly Hofland
Date: 10 May 2021**

Table of contents

1	Vibration Monitoring	3
	1.1 Real time monitoring	3
	1.2 Attended Monitoring	5
2	Noise Monitoring	6
	2.1 Real time monitoring	6
	2.2 Attended Monitoring	8
3	Dust Monitoring	9
	3.1 Real Time Monitoring	9
	3.2 Dust Deposition Monitoring	13
4	Water Quality Monitoring	13

1 Vibration Monitoring

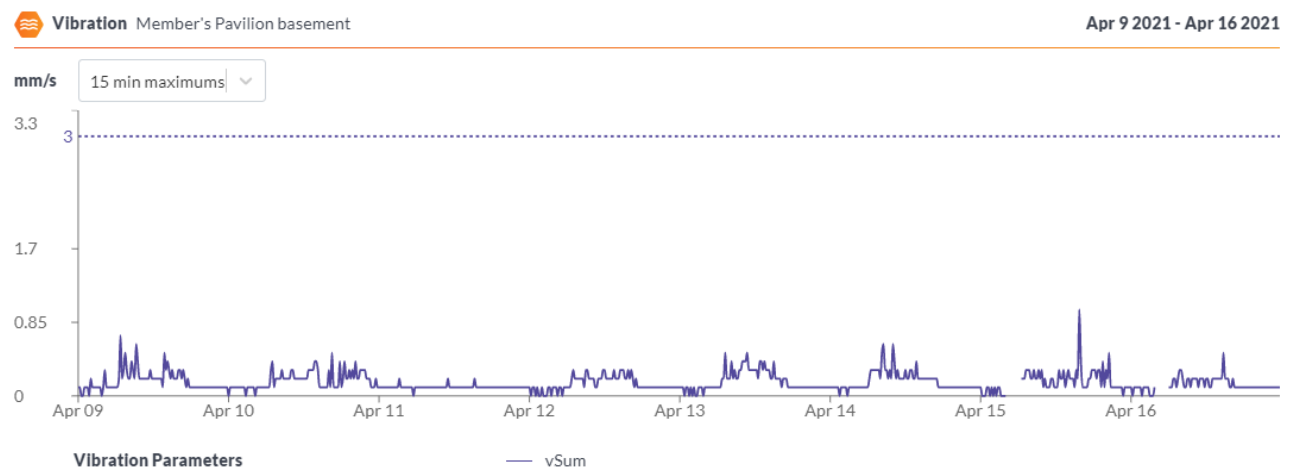
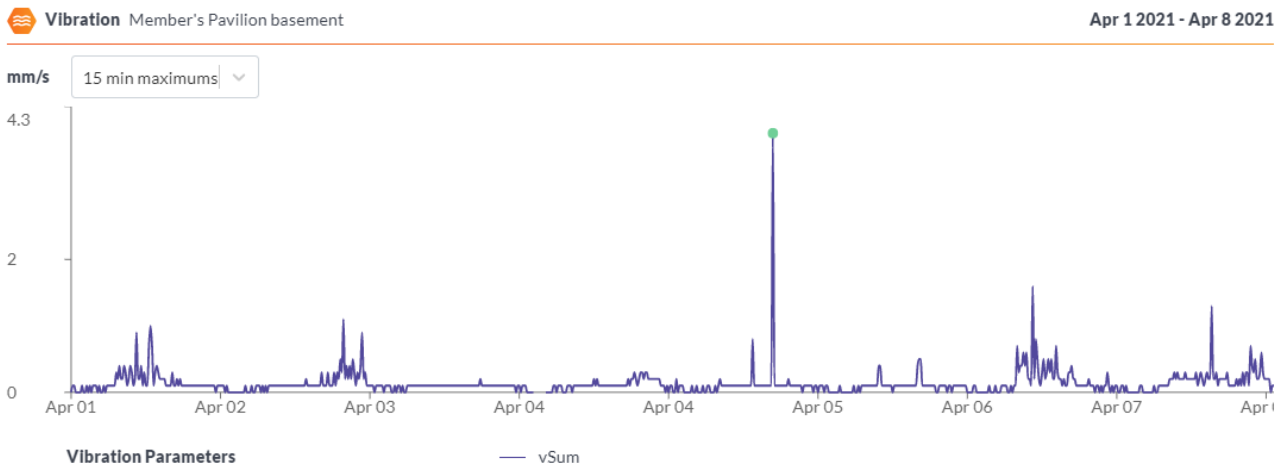
1.1 Real time monitoring

1.1.1 Results

Real time vibration monitoring is conducted in 2 locations

- SCG Members Stand – Criteria of 3mm/s
- Noble Stand adjacent to Fox Studios Boundary – adopted criteria of 7.5mm/s

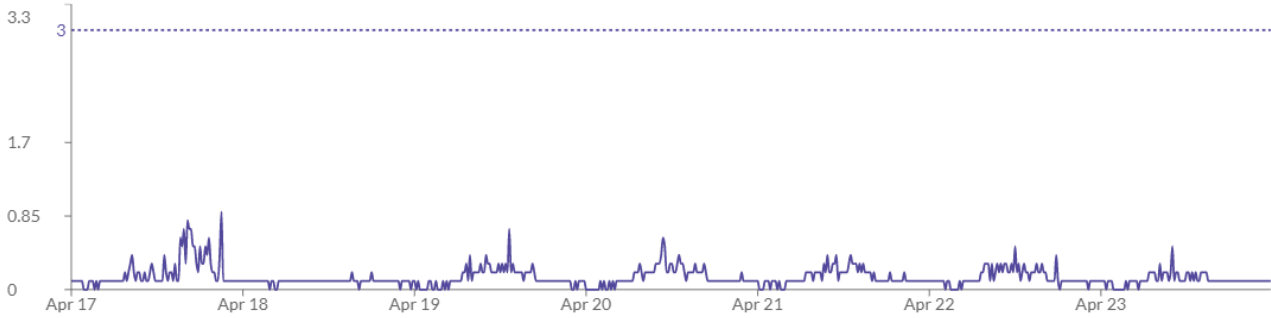
SCG Members Stand



Vibration Member's Pavilion basement

Apr 17 2021 - Apr 23 2021

mm/s 15 min maximums



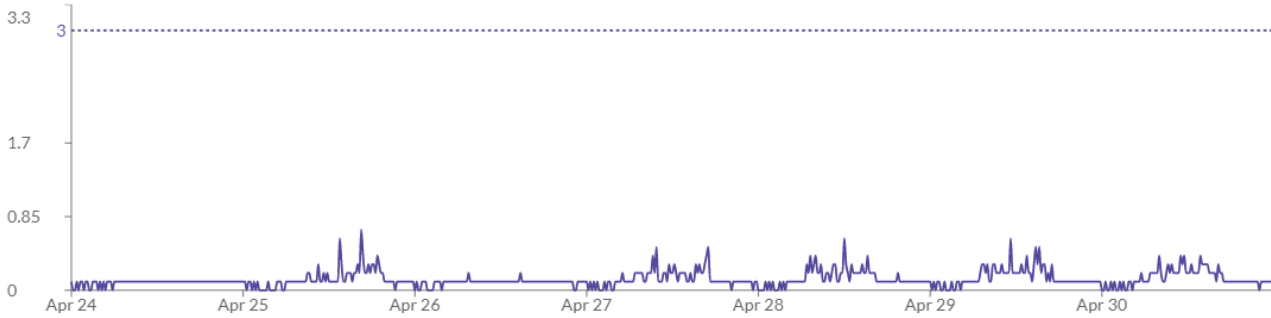
Vibration Parameters

— vSum

Vibration Member's Pavilion basement

Apr 24 2021 - Apr 30 2021

mm/s 15 min maximums



Vibration Parameters

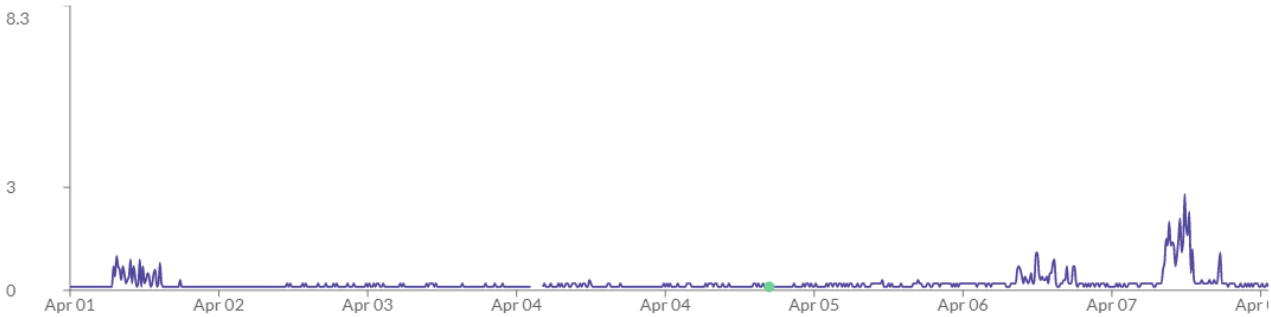
— vSum

Noble Stand

Vibration Noble Stand basement sprinkler room

Apr 1 2021 - Apr 8 2021

mm/s 15 min maximums

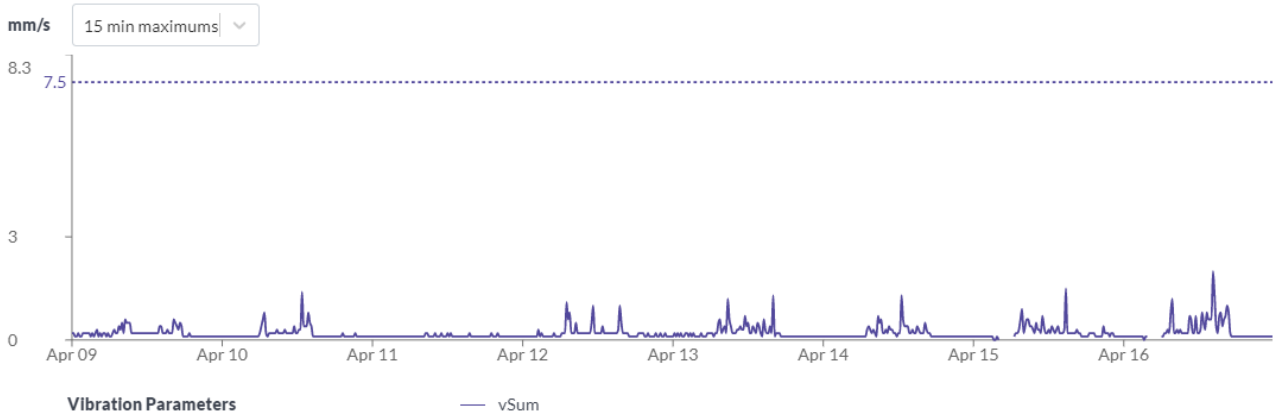


Vibration Parameters

— vSum

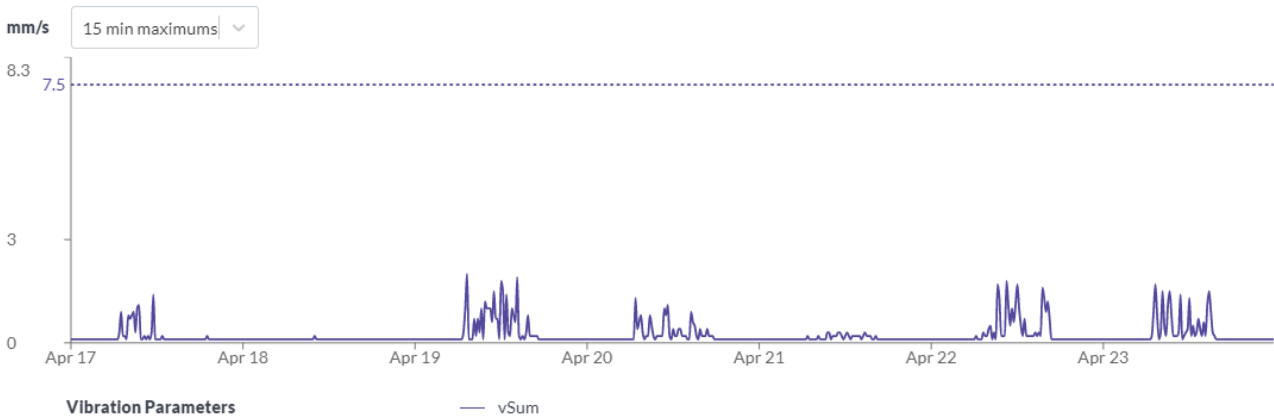
Vibration Noble Stand basement sprinkler room

Apr 9 2021 - Apr 16 2021



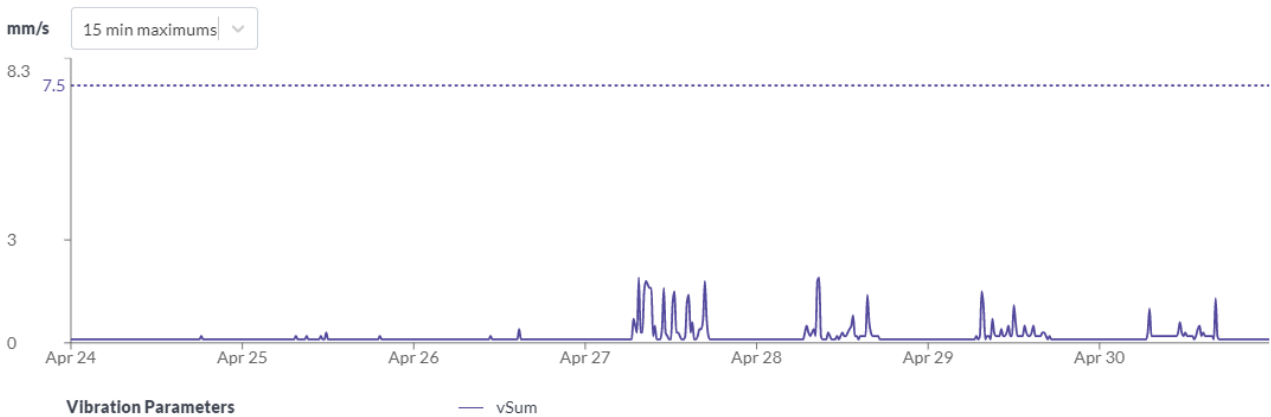
Vibration Noble Stand basement sprinkler room

Apr 17 2021 - Apr 23 2021



Vibration Noble Stand basement sprinkler room

Apr 24 2021 - Apr 30 2021



1.1.2 Discussion

Results were compliant with the relevant criteria during the period. There was one event that exceeded trigger levels. However, upon investigation no activities were occurring onsite to trigger the event.

1.2 Attended Monitoring

Attended monitoring was not conducted during this period as real time monitors were installed and functional during the assessed period.

2 Noise Monitoring

2.1 Real time monitoring

Real time monitors are located at the following locations

- Kira Childcare
- North East Boundary near Moore Park Road

The adopted criteria are as per the conditions of the Development Consent below:

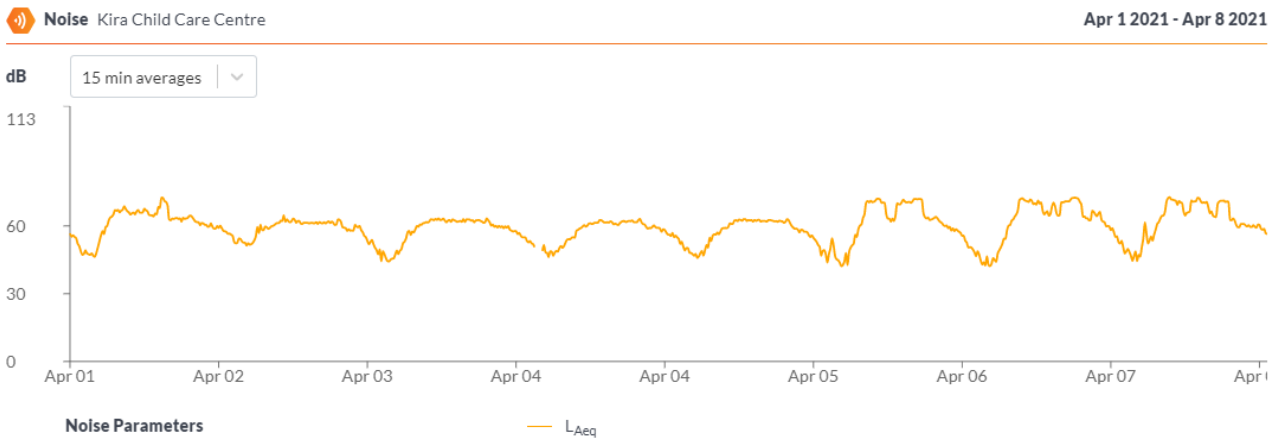
C7. All works that generate noise exceeding 75dB(A) LAeq (15mins) are subject to the intra-day respite periods, as approved by the Planning Secretary in the CNVMP in condition B28

B28e(iv). the following intra-day respite periods (as defined by ICNG) for works exceeding 75dB(A) LAeq(15 mins), unless otherwise agreed with the identified sensitive receivers such as UTS, Kira Child Care Centre and / or Fox Studios and evidence of the agreement provided to the Planning Secretary, prior to the commencement of the works:

- *in continuous blocks not exceeding 3 hours each with one hour of respite every three hours block;*
- *scheduling of works outside of the examination time for educational establishments; and*
- *noise intrusive works commencing after 8am and be undertaken within the approved standard construction hours.*

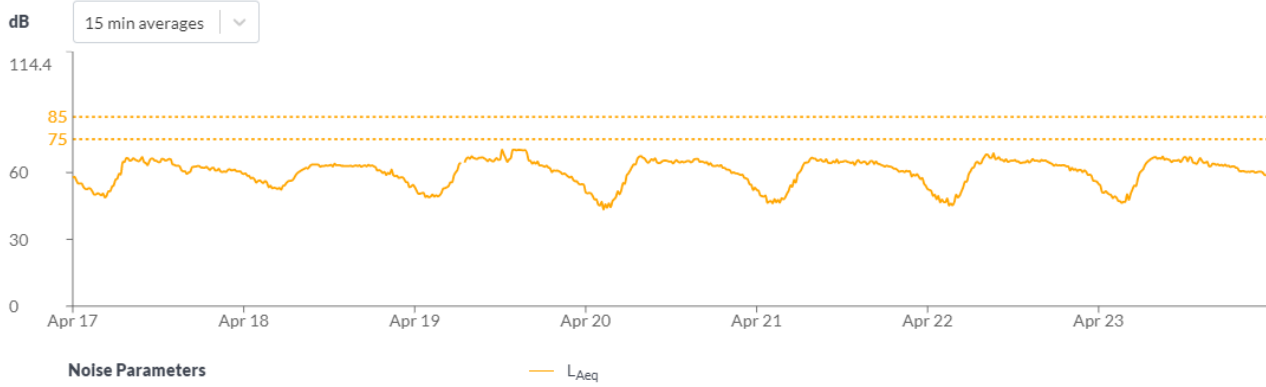
2.1.1 Results

Kira Child Care Centre



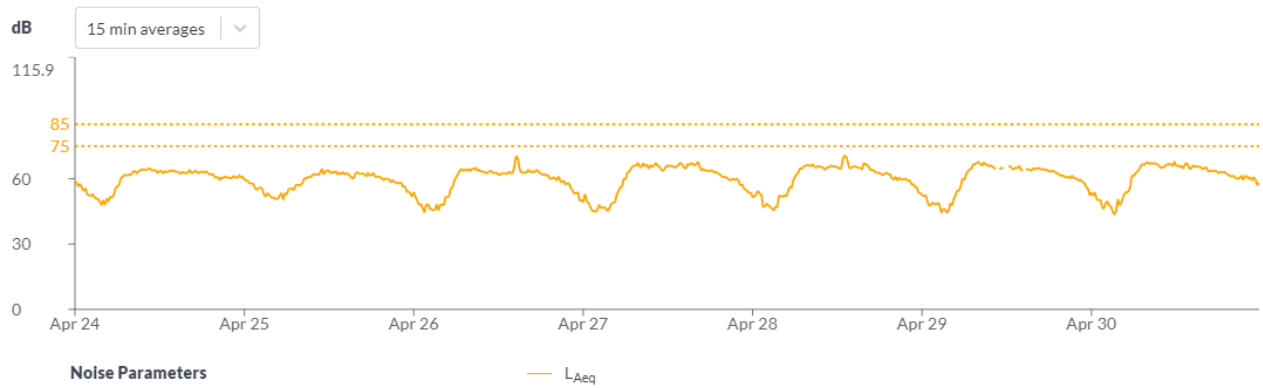
Noise Kira Child Care Centre

Apr 17 2021 - Apr 23 2021



Noise Kira Child Care Centre

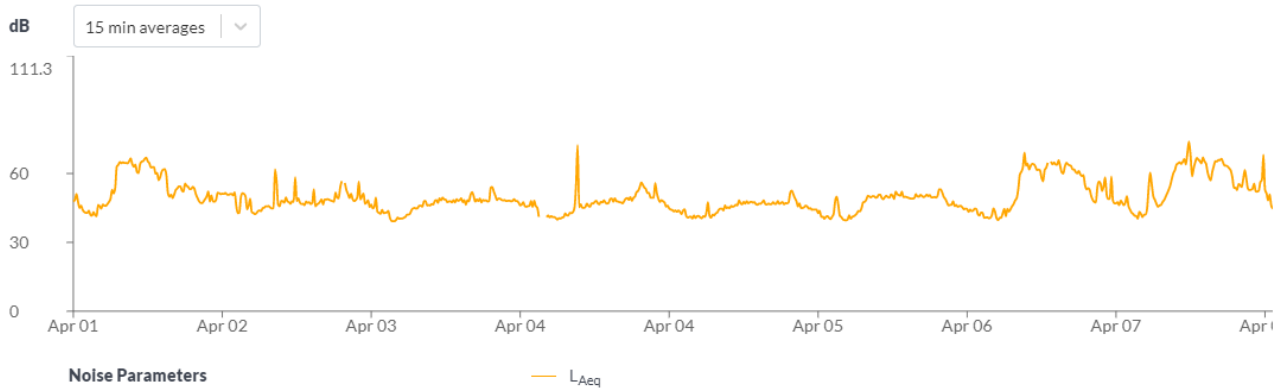
Apr 24 2021 - Apr 30 2021



Moore Park Road

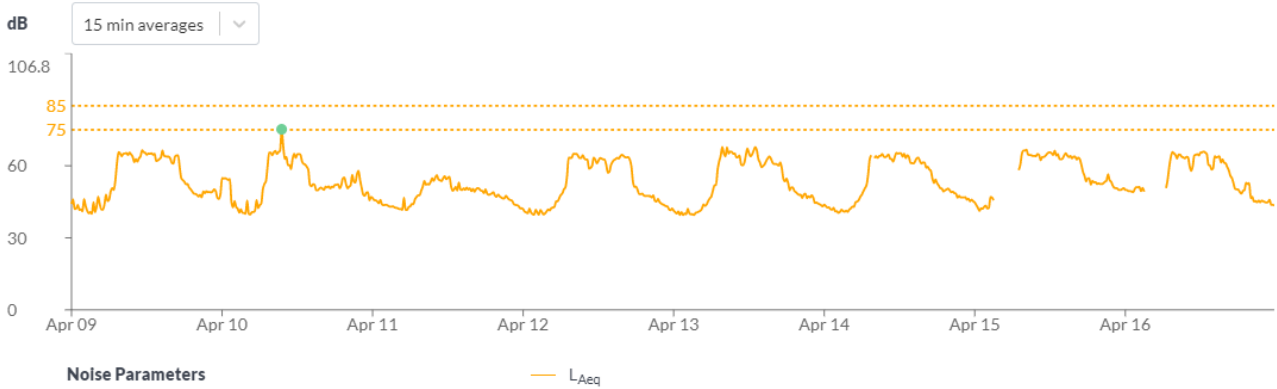
Noise Gatehouse, Moore Park Road

Apr 1 2021 - Apr 8 2021



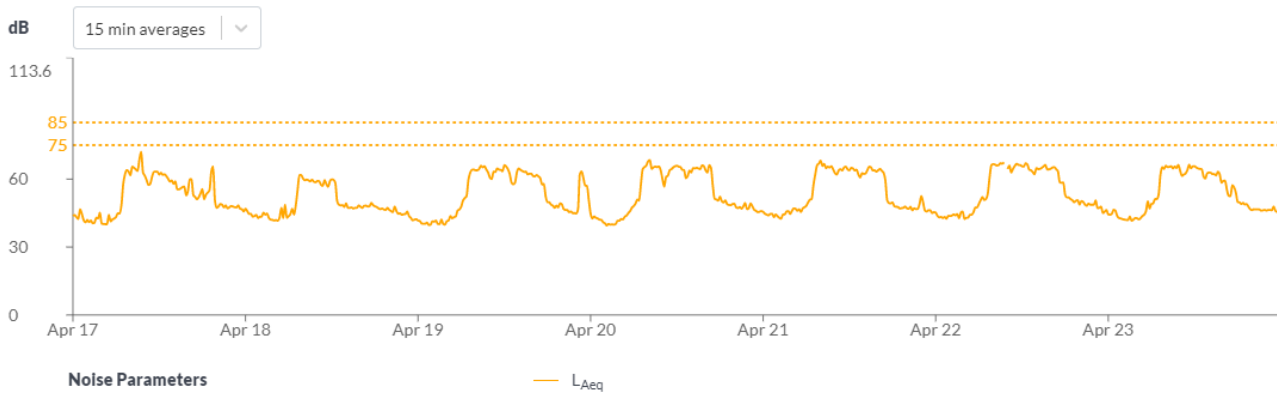
Noise Gatehouse, Moore Park Road

Apr 9 2021 - Apr 16 2021



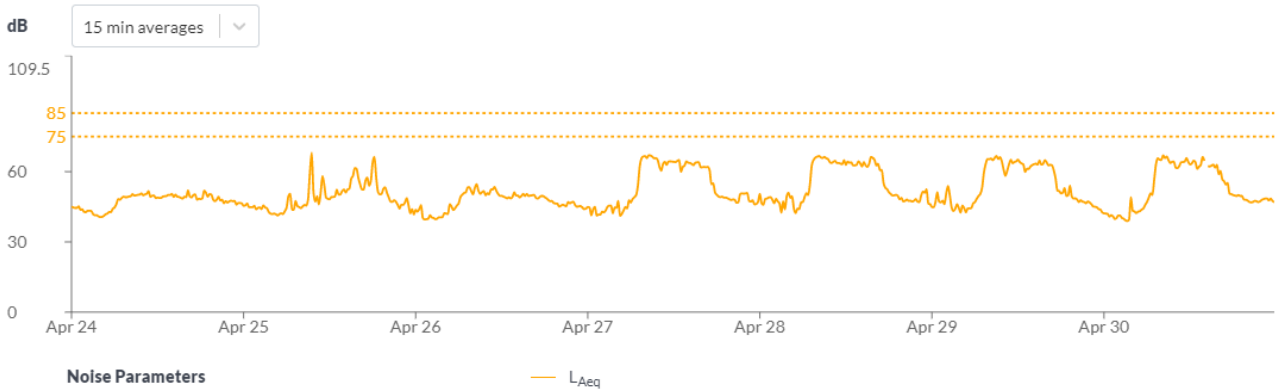
Noise Gatehouse, Moore Park Road

Apr 17 2021 - Apr 23 2021



Noise Gatehouse, Moore Park Road

Apr 24 2021 - Apr 30 2021



2.1.2 Discussion

Works were compliant with the criteria. The predominant source of noise was due to peak hour traffic. There are small periods of missing data due to a malfunction of the monitor, and scheduled site maintenance.

2.2 Attended Monitoring

Attended monitoring was carried out at 4 locations as below

Date	Time	Location	Predicted	Result (L _{Aeq})	Activities	Comment
------	------	----------	-----------	----------------------------	------------	---------

Laeq(15)						
7/4/2021	13:26	E5	77	68.1	Excavation works, Jack hammering	Traffic dominant noise source, construction works are audible
7/4/2021	13:08	CC2	74	71.0	Excavation works, hammering	Traffic dominant noise source
7/4/2021	12:50	R6	80	68.1	Excavation works, Tower crane lifting, concrete pouring	Traffic dominant noise source, construction works are audible
7/4/2021	13:47	C1	76	69.3	Excavation works, hammering	Construction works are audible.

3 Dust Monitoring

3.1 Real Time Monitoring

2 Real time dust monitors are installed on the site

- North eastern boundary near Moore Park Road
- SCG
- Kira Childcare Centre

The criteria and trigger values are as below:

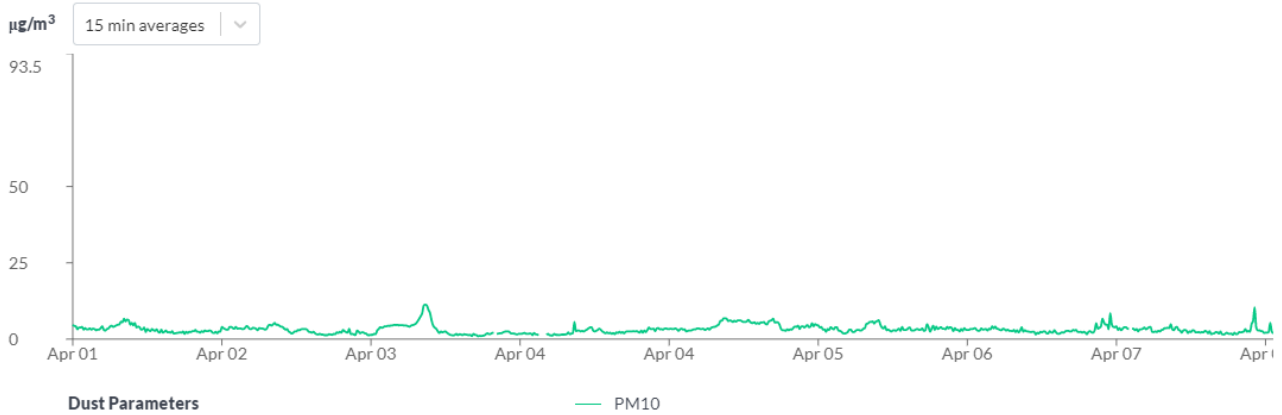
Trigger Stage	Averaging Period	Trigger Value ($\mu\text{g}/\text{m}^3$)	Action Required
1 Investigate	1 hour	85	Site Manager to undertake review of possible dust sources operating during the average period.
	3 hour	80	Identify possible measures for these activities; action if deemed necessary.
2 Action	1 hour	470	Site Manager to attend site and ensure implementation of the control.
	3 hour	160	Effectiveness of control actions to be reviewed and escalate where appropriate.
3 Stop Work	1 hour	940	Targeted shut down of dust-generating activities until the measured pollutant levels are below the stated trigger value.
	3 hour	320	Identify long-term solutions to dust issues.

3.1.1 Results

Moore Park Road

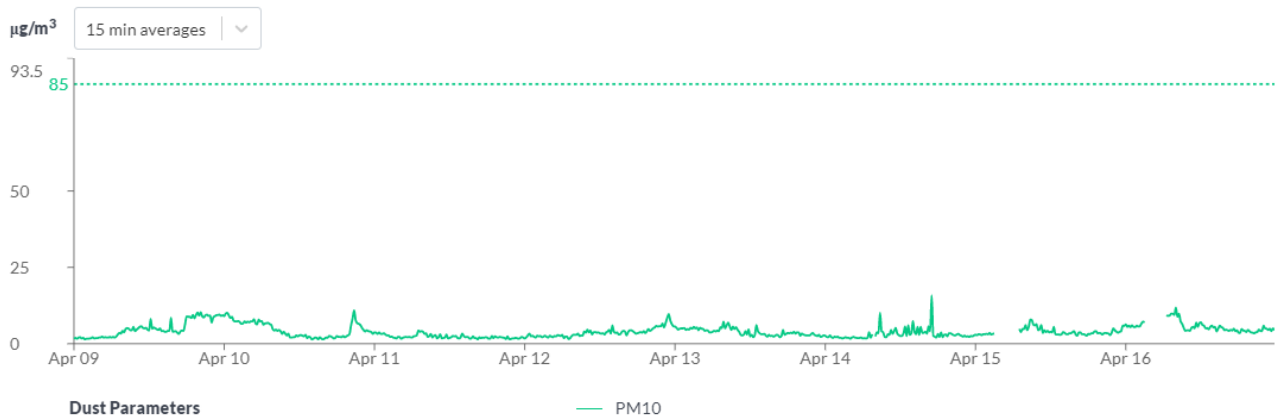
Dust Gatehouse, Moore Park Road

Apr 1 2021 - Apr 8 2021



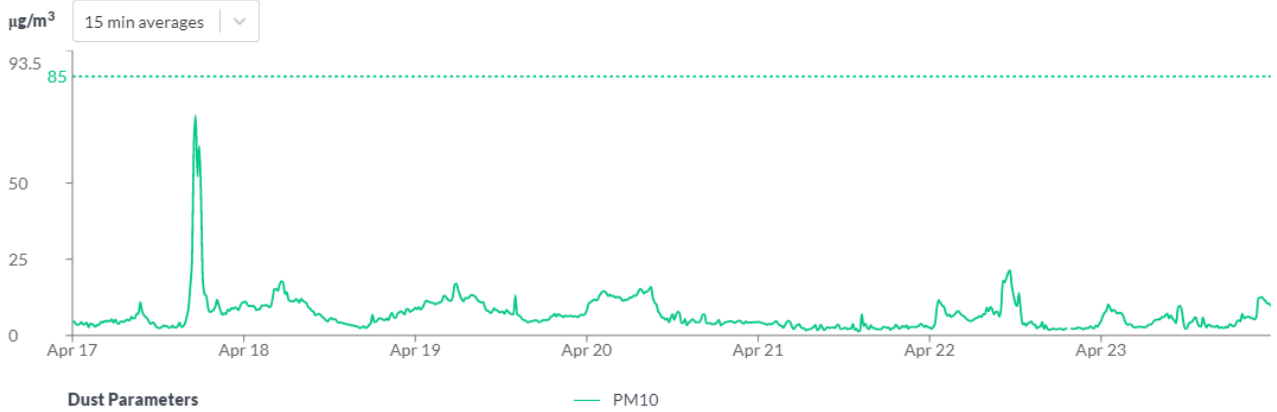
Dust Gatehouse, Moore Park Road

Apr 9 2021 - Apr 16 2021



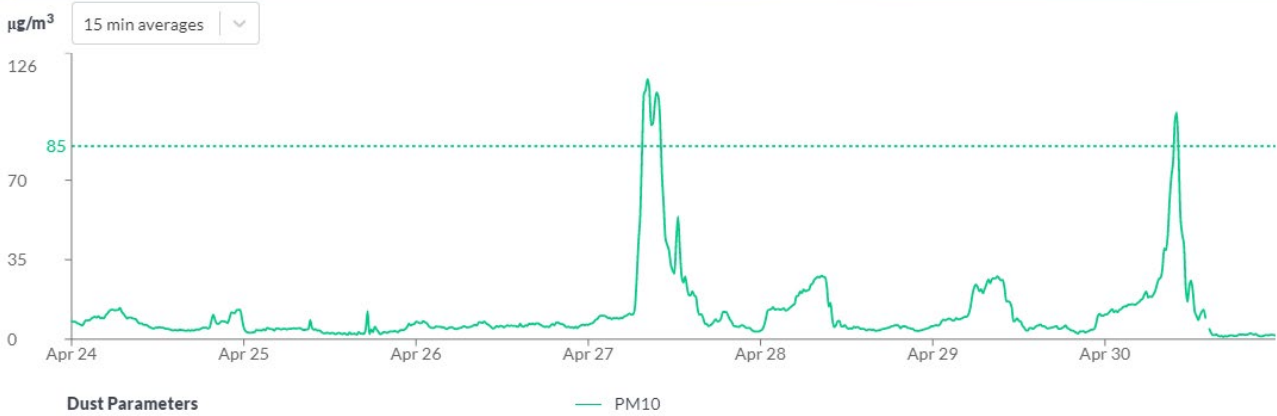
Dust Gatehouse, Moore Park Road

Apr 17 2021 - Apr 23 2021



Dust Gatehouse, Moore Park Road

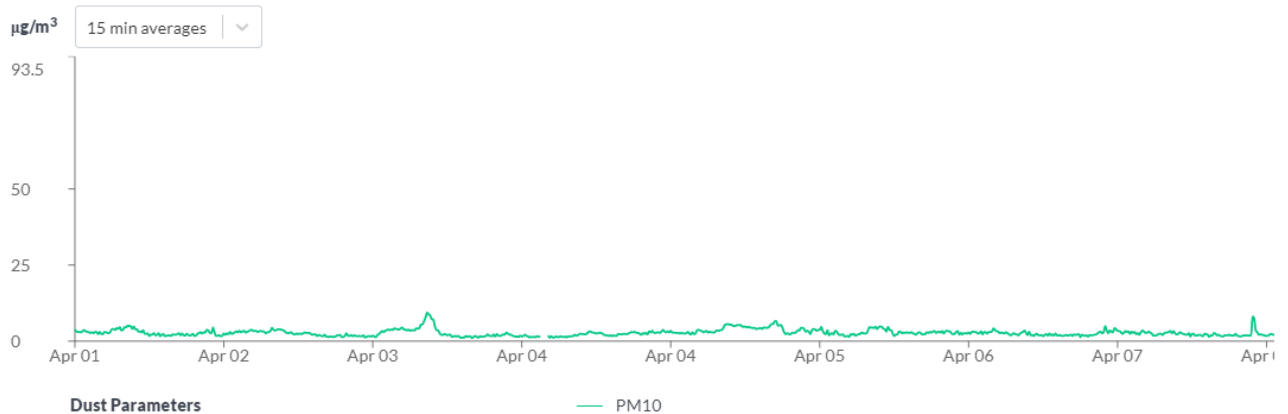
Apr 24 2021 - Apr 30 2021



Kira Childcare Centre

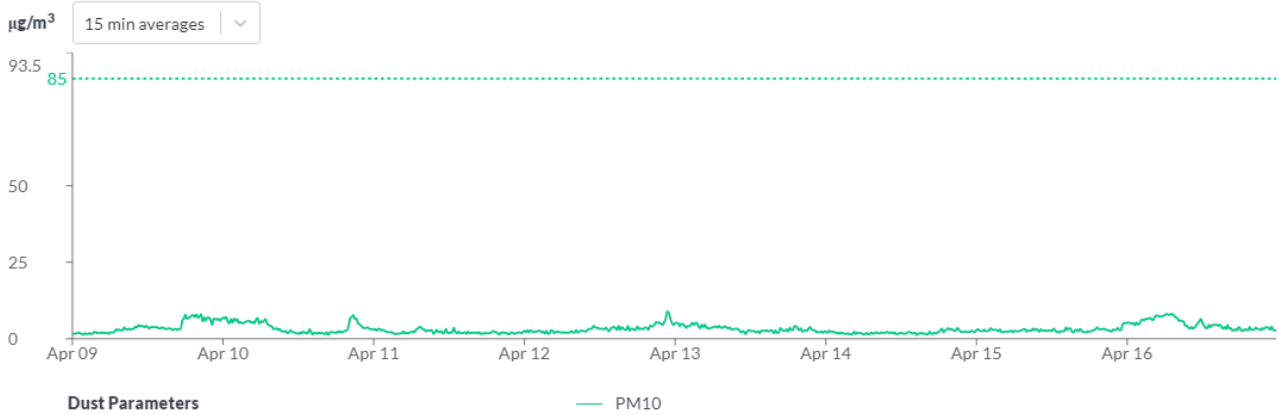
Dust Kira Child Care Centre

Apr 1 2021 - Apr 8 2021



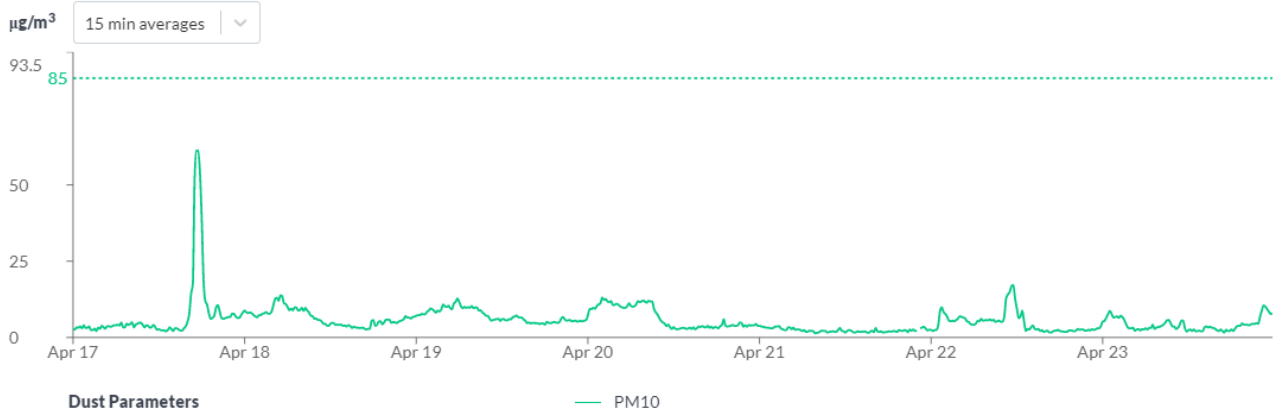
Dust Kira Child Care Centre

Apr 9 2021 - Apr 16 2021



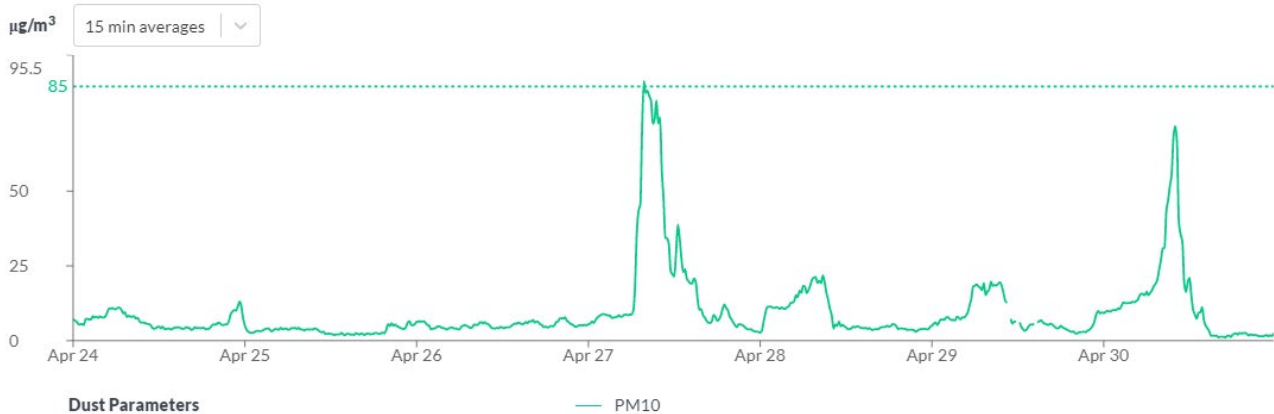
Dust Kira Child Care Centre

Apr 17 2021 - Apr 23 2021



Dust Kira Child Care Centre

Apr 24 2021 - Apr 30 2021



3.1.2 Discussion

There was 2 exceedances of the 1 hour investigate trigger levels. Site inspection was undertaken, and further mitigations put in place to reduce generation of dust. There are small periods of missing data due to a malfunction of the monitor, and scheduled site maintenance.

3.2 Dust Deposition Monitoring

Gauge ID	Location	Trigger value g/m2/month	Result g/m2/month	Comment
April 2020				
DDG1	1	4	1.4	No trigger level events were recorded by real time monitors
DDG2	2A	4	0.3	No trigger level events were recorded by real time monitors

4 Water Quality Monitoring

Water quality monitoring was undertaken in 3 locations in Kippax Lake.

Date	Time	Location	Temp	pH (c)	EC mS/cm	NTU	DO Mg/L	TDS g/L	Comment
16/04/21	14:08	1 (north)	19.13	7.56	0.231	28.5	9.03	0.150	No evidence of overland flow or impacts from SFs project activities. Significant plant detritus/ algal bloom
16/04/21	14:11	2 (mid)	19.12	7.40	0.227	30.4	5.13	0.147	No evidence of overland flow or impacts from SFs project activities.
16/04/21	14:14	3 (south)	19.20	7.28	0.224	29.5	4.03	0.146	No evidence of overland flow or impacts from SFs project activities.