

CH1435-D230225

Chris Chau
Kane Constructions Pty Ltd
2 John Street,
Waterloo NSW 2017
cchau@kane.com.au

Re: PM10 and PM2.5 Monitoring July 2023 – Westmead Hospital

Dear Sir,

Compliance Health & Environmental Consulting (CHEC) were engaged by Kane Constructions Pty Ltd to undertake PM10 and PM2.5 dust monitoring during construction works at Westmead Hospital, Westmead.

Construction is being undertaken adjacent to the children's hospital and monitoring was necessary to ensure control measures were adequate to minimise dust generation.

Criteria and monitoring methods have been adopted from the National Environment Protection (Ambient Air Quality) Measure, 2021. The criteria are presented below:

Table 1 – 24hr and Annual Average Criteria for PM2.5 and PM10 Dust ($\mu\text{g}/\text{m}^3$)

	PM 2.5	PM10
24hr Average	25	50
Annual Average	8	25

Monitoring for the Site commenced on the 4th April 2023 when an Airmet DX-2 monitoring unit was installed adjacent to the air conditioning intake for the hospital, as shown on **Figure 1** – Monitoring Location. This monitor was Sited in accordance with AS/NZS 3580.1.1:2016, as required by NEPM, 2021.

During the month of July, the 24hr average criteria was not exceeded for PM10 or PM2.5; however, several spikes in the one-hour average to a maximum value $37 \mu\text{g}/\text{m}^3$ for PM2.5 were observed.

The spikes were exclusively noted to be during the night, or out of working hours. No explanation has been provided to date as to why these events have occurred; however, the circumstance should be considered during future monitoring events if exceedances are observed.

It should be noted that data was not recorded between the 8th and 20th July due to equipment failure. Data reported outside of this period appeared relatively consistent with no exceedances of the 24-hour average at any time.

Considering no exceedances have been previously reported at any time, and site conditions have remained consistent, it is highly unlikely any exceedances would have occurred whilst the monitor was offline. As such, the omission of this data is not considered to alter the conclusion that no exceedances were reported during this month.



The monitoring data for the month of July 2023 is considered compliant with relevant criteria. Refer to **Figure 2** – PM10 May Monitoring Data and **Figure 3** – PM2.5 May Monitoring Data.

Regards,

A handwritten signature in black ink, appearing to read 'J. Gross'.

Jayden Gross

Environmental Consultant

Compliance Health & Environmental Consulting Pty Ltd



Figure 1 – Site Layout





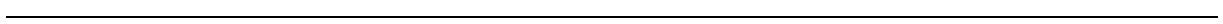
- Monitoring Location
- Construction Works Area



Title		Site Layout					
Site Address	Westmead Hospital, Westmead	Project No.	CH1435	Figure No.	1	Date	01/05/2023
Client	Kane Constructions Pty Ltd	Scale	NTS	Compiled	JG	Revision	Rev. 1



Figure 2 – PM10 July monitoring Data



PM 10 Monitoring Data-July

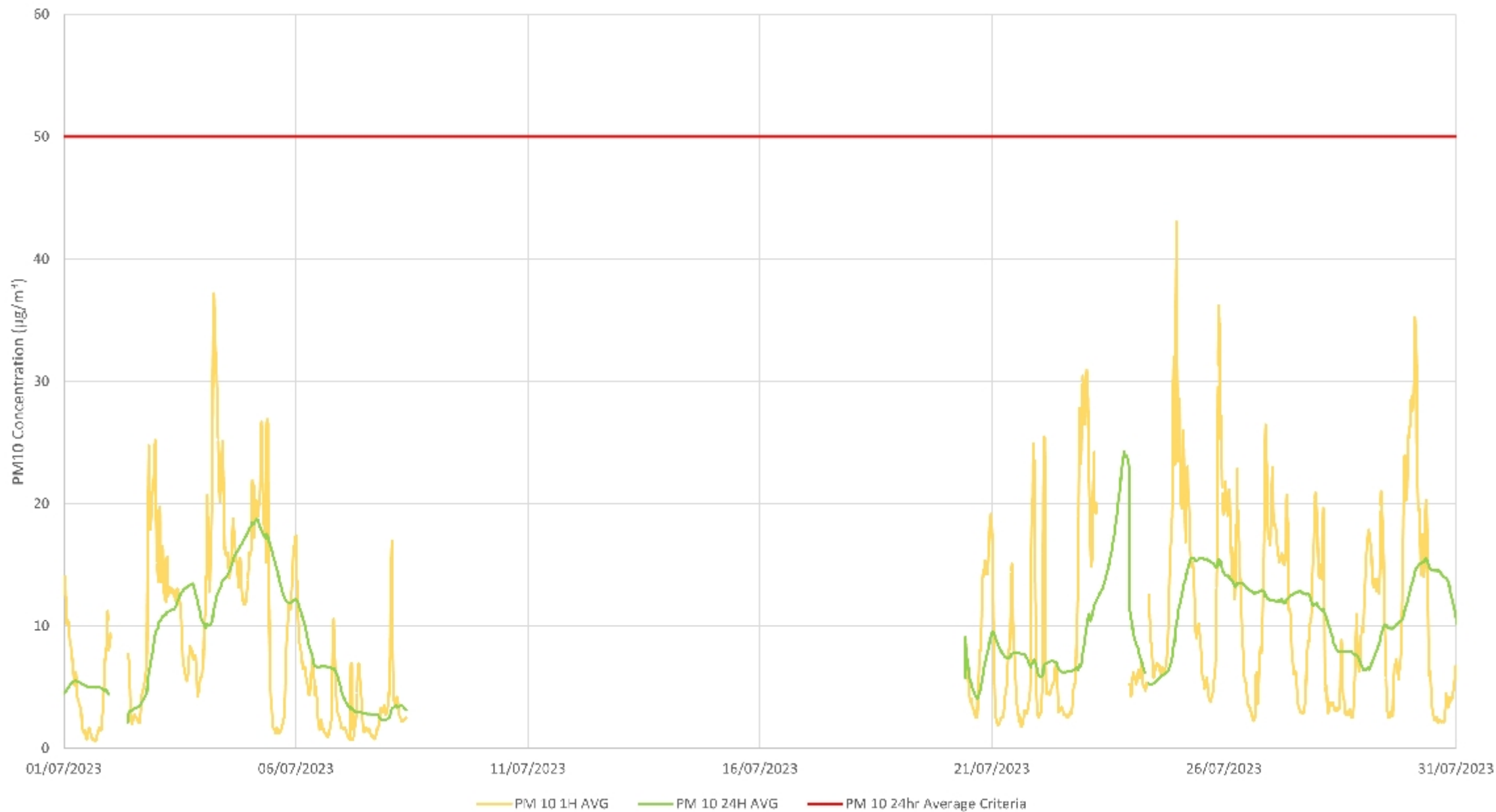
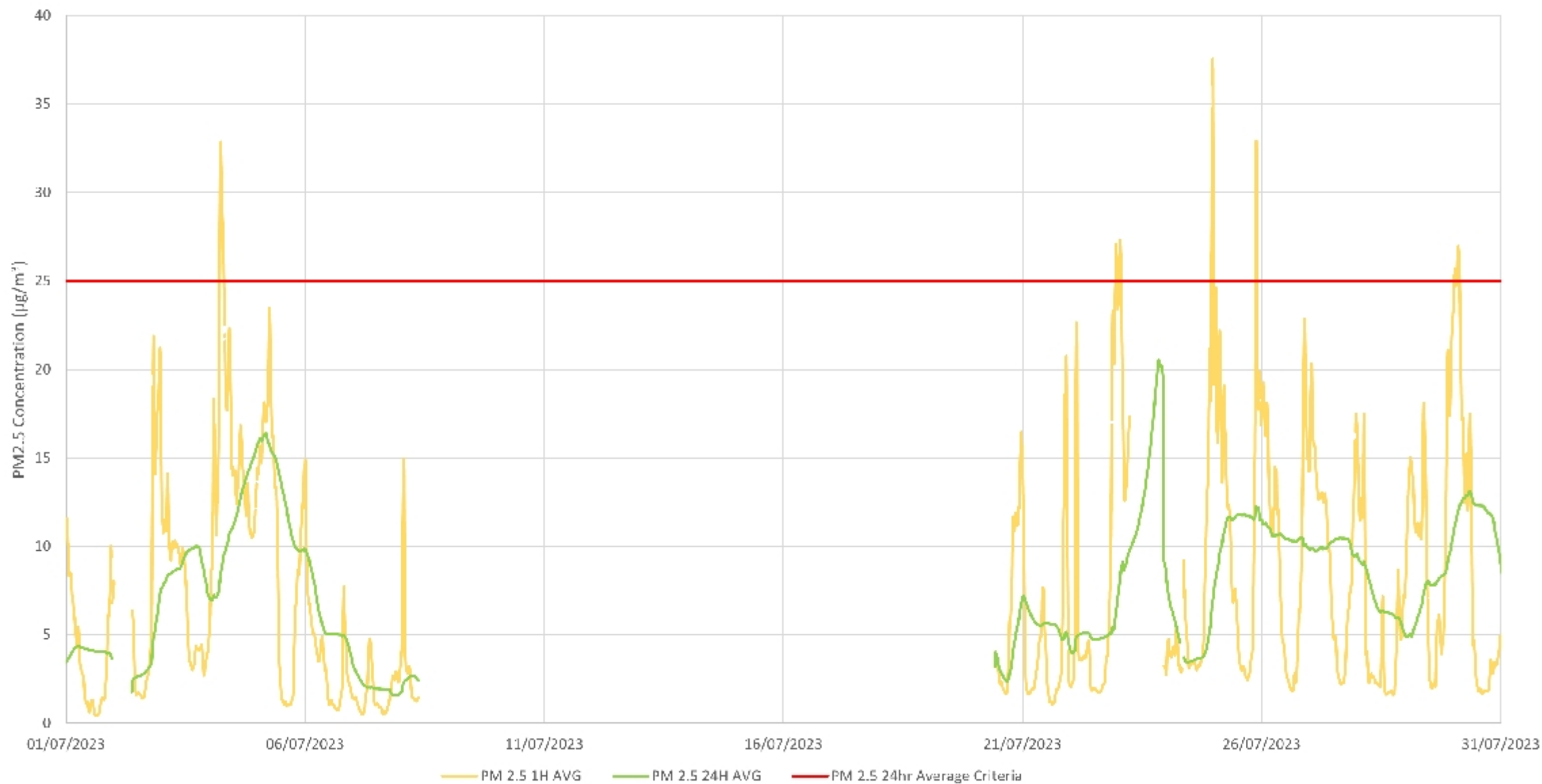




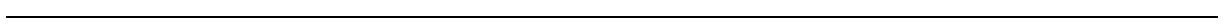
Figure 3 – PM2.5 July Monitoring Data

PM 2.5 Monitoring Data-July





Attachment 1 – PM10 and PM2.5 Daily 24hr Averages



Date	Sample No.	Location of Sample	Time on	Time off	PM 10 24H AVG (ug/m3)	PM 2.5 24H AVG (ug/m3)
1/07/2023	1	Plant Room	12:00:00 AM	11:59:59 PM	4.4	3.7
2/07/2023	2	Plant Room	12:00:00 AM	11:59:59 PM	9.7	7.6
3/07/2023	3	Plant Room	12:00:00 AM	11:59:59 PM	10.3	7.1
4/07/2023	4	Plant Room	12:00:00 AM	11:59:59 PM	18.0	15.7
5/07/2023	5	Plant Room	12:00:00 AM	11:59:59 PM	12.2	9.8
6/07/2023	6	Plant Room	12:00:00 AM	11:59:59 PM	4.5	3.3
7/07/2023	7	Plant Room	12:00:00 AM	11:59:59 PM	2.5	1.7
20/07/2023	8	Plant Room	12:00:00 AM	11:59:59 PM	9.5	7.1
21/07/2023	9	Plant Room	12:00:00 AM	11:59:59 PM	6.0	4.1
22/07/2023	10	Plant Room	12:00:00 AM	11:59:59 PM	8.8	7.2
23/07/2023	11	Plant Room	12:00:00 AM	11:59:59 PM	10.6	8.4
24/07/2023	12	Plant Room	12:00:00 AM	11:59:59 PM	10.7	7.3
25/07/2023	13	Plant Room	12:00:00 AM	11:59:59 PM	14.4	11.5
26/07/2023	14	Plant Room	12:00:00 AM	11:59:59 PM	12.1	9.8
27/07/2023	15	Plant Room	12:00:00 AM	11:59:59 PM	11.9	9.6
28/07/2023	16	Plant Room	12:00:00 AM	11:59:59 PM	6.5	5.0
29/07/2023	17	Plant Room	12:00:00 AM	11:59:59 PM	12.7	10.6
30/07/2023	18	Plant Room	12:00:00 AM	11:59:59 PM	10.7	9.0
31/07/2023	19	Plant Room	12:00:00 AM	11:59:59 PM	6.3	4.4