

CH1435-D240035

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**Re: PM10 and PM2.5 Monitoring January 2024 – Westmead Hospital**

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
<b>24hr Average</b>	25	50
<b>Annual Average</b>	8	25

Monitoring for the Site commenced on the 4<sup>th</sup> 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.

PM10 24hr average concentrations were recorded below the criteria of  $50\mu\text{g}/\text{m}^3$  with a maximum concentration of  $14.4\mu\text{g}/\text{m}^3$ . Likewise, PM2.5 24hr average concentrations were recorded at a maximum of  $8.6\mu\text{g}/\text{m}^3$ , which was less than the criteria of  $25\mu\text{g}/\text{m}^3$ .

The monitoring data for the month of January 2024 is considered compliant with relevant criteria. Refer to **Figure 2** – PM10 January Monitoring Data and **Figure 3** – PM2.5 January Monitoring Data.

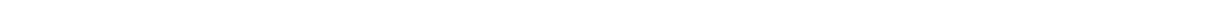
Regards,



Jayden Gross  
Environmental Consultant  
Compliance Health & Environmental Consulting Pty Ltd



## Figure 1 – Site Layout





- Monitoring Location
- Construction Works Area



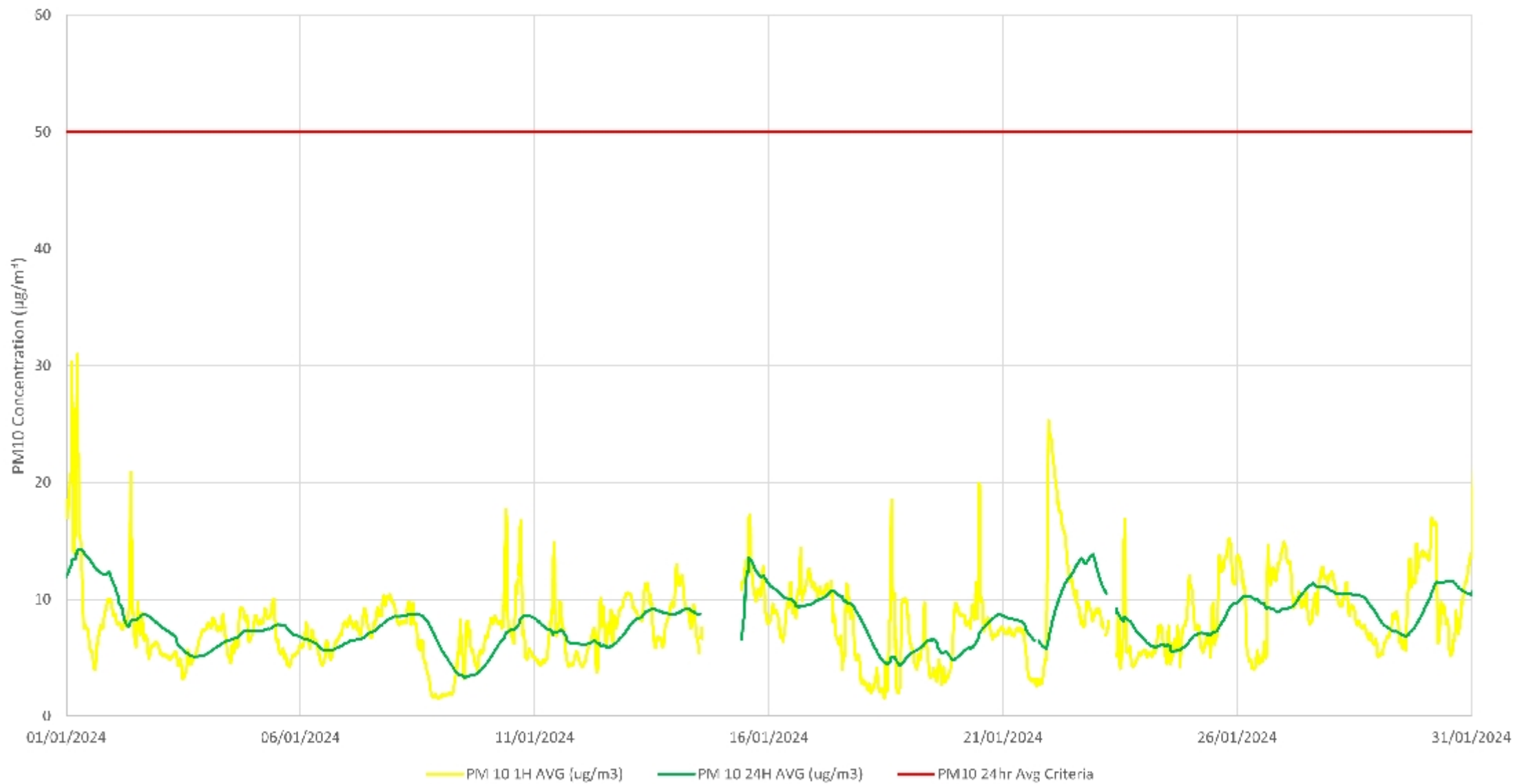
Title		Site Layout					
Site Address	Westmead Hospital, Westmead	Project No.	CH1435	Figure No.	1	Date	01/05/2023
Client	Kane Constructions Pty Ltd	Scale	NTS	Compiled	JG	Revision	Rev. 1



**Figure 2 – PM10 January Monitoring Data**



# PM10 Monitoring Data



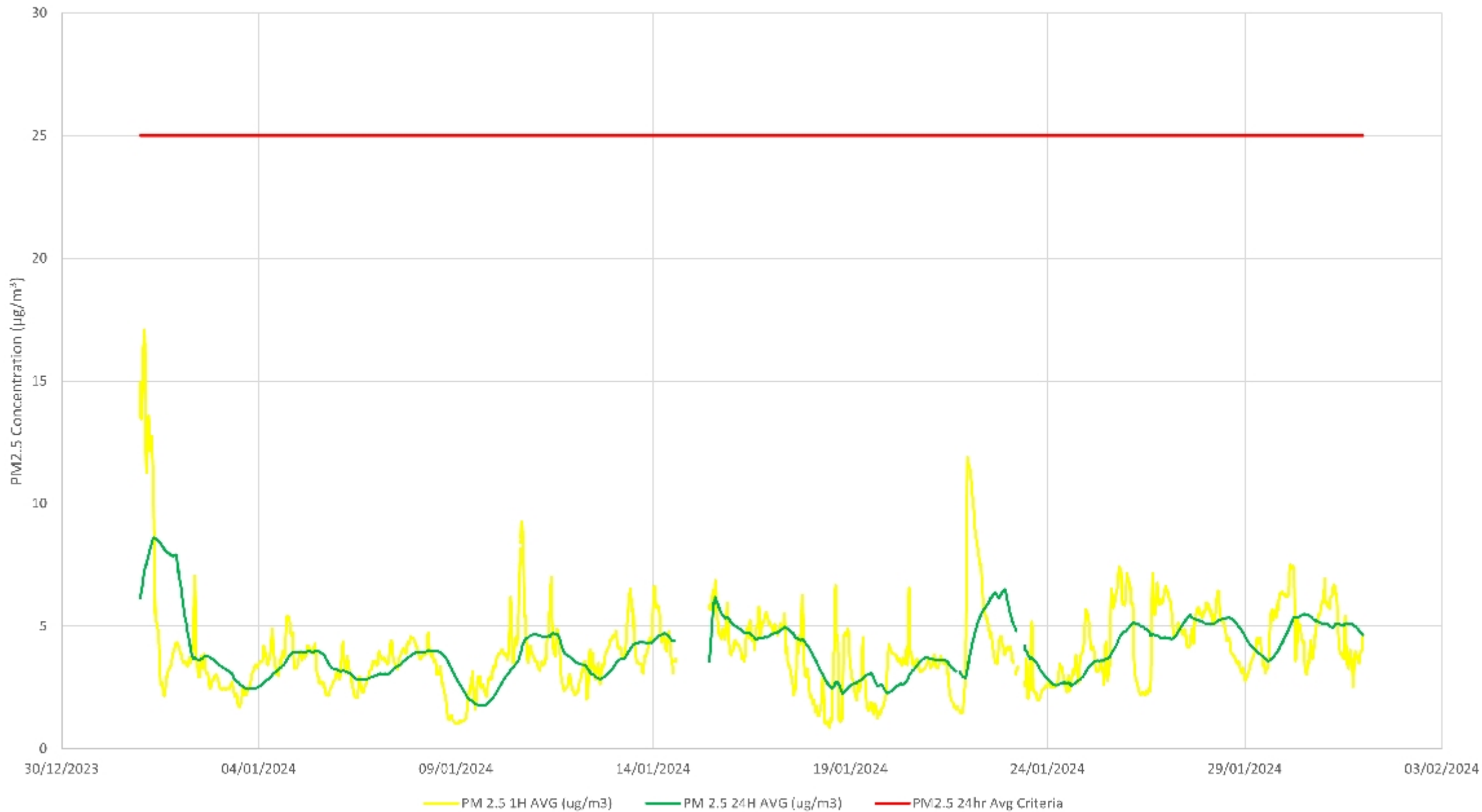


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### Figure 3 – PM2.5 January Monitoring Data

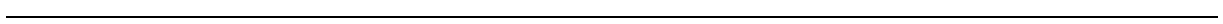
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PM2.5 Monitoring Data





## **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)
1/01/2024	1	Plant Room	12:00:00 AM	11:59:59 PM	11.4	6.9
2/01/2024	2	Plant Room	12:00:00 AM	11:59:59 PM	7.8	3.4
3/01/2024	3	Plant Room	12:00:00 AM	11:59:59 PM	5.3	2.5
4/01/2024	4	Plant Room	12:00:00 AM	11:59:59 PM	7.3	3.9
5/01/2024	5	Plant Room	12:00:00 AM	11:59:59 PM	6.8	3.2
6/01/2024	6	Plant Room	12:00:00 AM	11:59:59 PM	6.3	3.0
7/01/2024	7	Plant Room	12:00:00 AM	11:59:59 PM	8.5	3.9
8/01/2024	8	Plant Room	12:00:00 AM	11:59:59 PM	5.8	2.9
9/01/2024	9	Plant Room	12:00:00 AM	11:59:59 PM	4.7	2.2
10/01/2024	10	Plant Room	12:00:00 AM	11:59:59 PM	8.4	4.7
11/01/2024	11	Plant Room	12:00:00 AM	11:59:59 PM	6.1	3.6
12/01/2024	12	Plant Room	12:00:00 AM	11:59:59 PM	7.6	3.4
13/01/2024	13	Plant Room	12:00:00 AM	11:59:59 PM	8.7	4.4
14/01/2024	14	Plant Room	12:00:00 AM	11:59:59 PM	6.6	3.6
15/01/2024	15	Plant Room	12:00:00 AM	11:59:59 PM	11.3	5.1
16/01/2024	16	Plant Room	12:00:00 AM	11:59:59 PM	9.9	4.7
17/01/2024	17	Plant Room	12:00:00 AM	11:59:59 PM	8.0	4.0
18/01/2024	18	Plant Room	12:00:00 AM	11:59:59 PM	5.3	2.6
19/01/2024	19	Plant Room	12:00:00 AM	11:59:59 PM	5.0	2.3
20/01/2024	20	Plant Room	12:00:00 AM	11:59:59 PM	8.6	3.7
21/01/2024	21	Plant Room	12:00:00 AM	11:59:59 PM	7.2	3.5
22/01/2024	22	Plant Room	12:00:00 AM	11:59:59 PM	12.7	5.9
23/01/2024	23	Plant Room	12:00:00 AM	11:59:59 PM	6.6	2.9
24/01/2024	24	Plant Room	12:00:00 AM	11:59:59 PM	6.6	3.2
25/01/2024	25	Plant Room	12:00:00 AM	11:59:59 PM	9.7	4.8
26/01/2024	26	Plant Room	12:00:00 AM	11:59:59 PM	9.2	4.5
27/01/2024	27	Plant Room	12:00:00 AM	11:59:59 PM	10.8	5.1
28/01/2024	28	Plant Room	12:00:00 AM	11:59:59 PM	8.6	4.6
29/01/2024	29	Plant Room	12:00:00 AM	11:59:59 PM	9.2	4.5
30/01/2024	30	Plant Room	12:00:00 AM	11:59:59 PM	10.5	5.1
31/01/2024	31	Plant Room	12:00:00 AM	11:59:59 PM	10.2	4.7