

Chris Chau
 Kane Constructions Pty Ltd
 2 John Street,
 Waterloo NSW 2017

cchau@kane.com.au

Re: PM10 and PM2.5 Monitoring May 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 May the 24hr average criteria was not exceeded for PM10 or PM2.5; however, several spikes in the one hour average to a maximum value of 109.5 $\mu\text{g}/\text{m}^3$ for PM10 and 93.8 $\mu\text{g}/\text{m}^3$ 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.

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

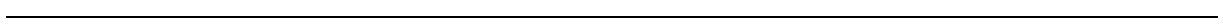
Regards,



Jayden Gross
 Environmental Consultant
 Compliance Health & Environmental Consulting Pty Ltd



Figure 1 – Site Layout





Monitoring Location



Construction Works Area

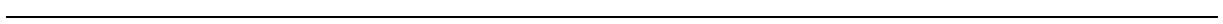


CHEC
Compliance Health &
Environmental Consulting

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 May monitoring Data



PM10 Monitoring-May

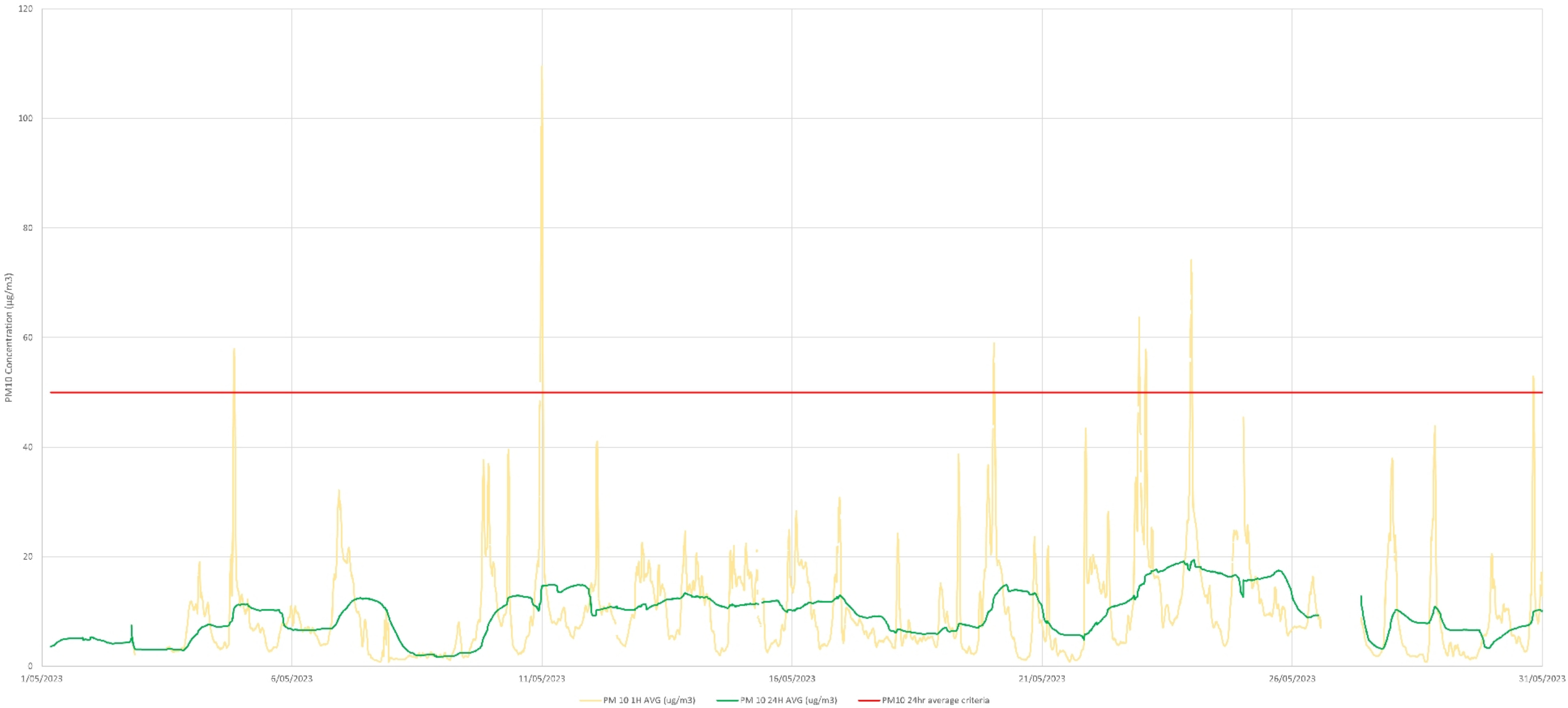




Figure 3 – PM2.5 May Monitoring Data

PM2.5 Monitoring-May

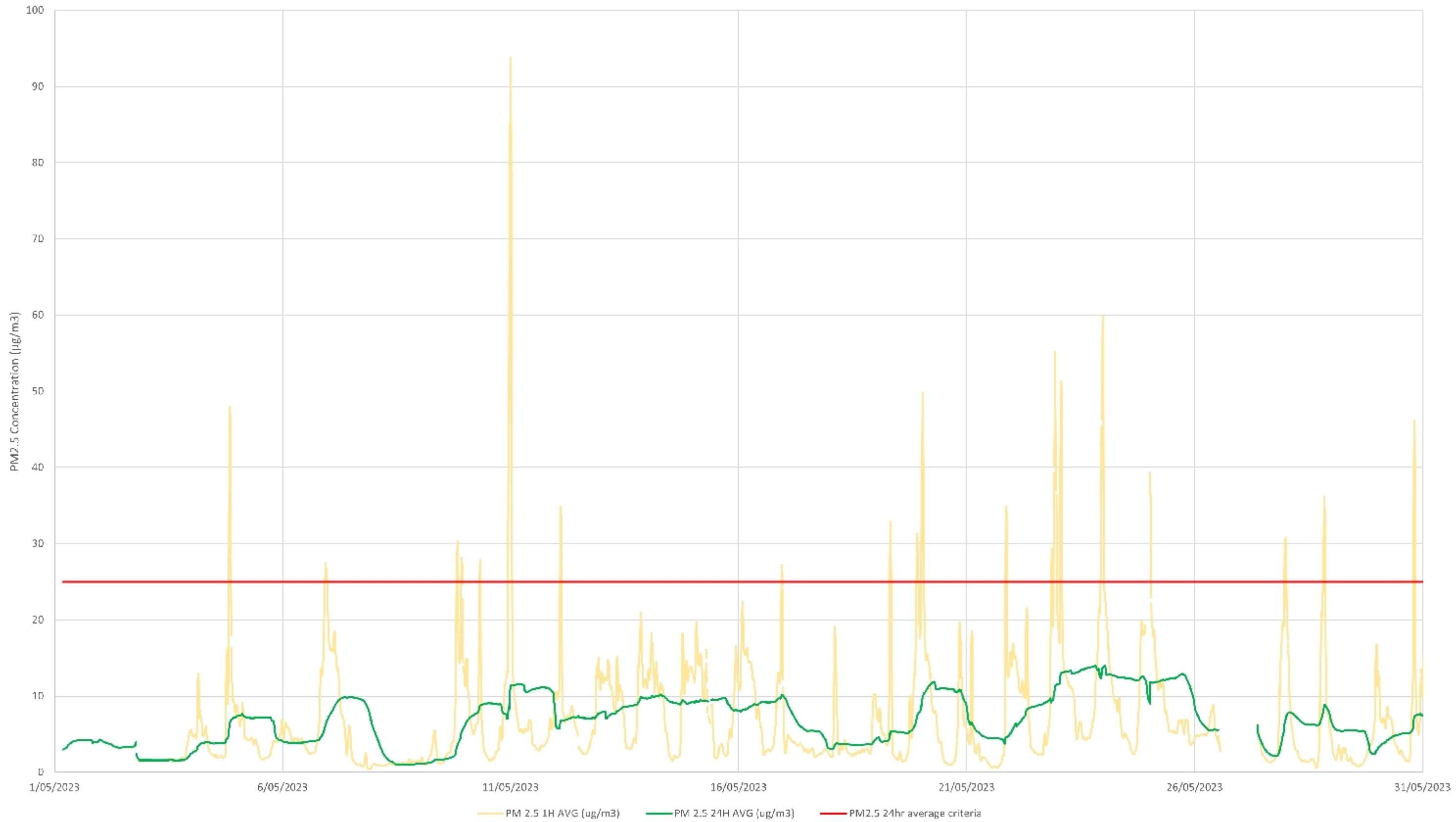




Figure 3 - Exceedance Raw Data, 1 Minute Intervals

Date	Sample No.	Location of Sample	Time on	Time off	PM 10 24H AVG (ug/m3)	PM 2.5 24H AVG (ug/m3)
1/05/2023	1	Plant Room	12:00:00 AM	11:59:59 PM	5.622335626	2.622332656
2/05/2023	2	Plant Room	12:00:00 AM	11:59:59 PM	4.416900603	1.873125849
3/05/2023	3	Plant Room	12:00:00 AM	11:59:59 PM	3.316604917	1.702777965
4/05/2023	4	Plant Room	12:00:00 AM	11:59:59 PM	7.810011831	4.270990079
5/05/2023	5	Plant Room	12:00:00 AM	11:59:59 PM	9.852499345	6.693642161
6/05/2023	6	Plant Room	12:00:00 AM	11:59:59 PM	7.00065821	4.278166224
7/05/2023	7	Plant Room	12:00:00 AM	11:59:59 PM	11.38391701	8.974662043
8/05/2023	8	Plant Room	12:00:00 AM	11:59:59 PM	2.962499249	1.79581674
9/05/2023	9	Plant Room	12:00:00 AM	11:59:59 PM	3.229796332	2.177844844
10/05/2023	10	Plant Room	12:00:00 AM	11:59:59 PM	11.72411592	8.264835919
11/05/2023	11	Plant Room	12:00:00 AM	11:59:59 PM	14.33301948	10.88572629
12/05/2023	12	Plant Room	12:00:00 AM	11:59:59 PM	10.44247071	7.036895706
13/05/2023	13	Plant Room	12:00:00 AM	11:59:59 PM	11.95057096	8.468231721
14/05/2023	14	Plant Room	12:00:00 AM	11:59:59 PM	11.68453155	9.490047204
15/05/2023	15	Plant Room	12:00:00 AM	11:59:59 PM	11.26612465	9.156207032
16/05/2023	16	Plant Room	12:00:00 AM	11:59:59 PM	11.55417466	8.978020412
17/05/2023	17	Plant Room	12:00:00 AM	11:59:59 PM	9.348080515	6.03719468
18/05/2023	18	Plant Room	12:00:00 AM	11:59:59 PM	6.20762358	3.625933051
19/05/2023	19	Plant Room	12:00:00 AM	11:59:59 PM	7.510274778	5.263383748
20/05/2023	20	Plant Room	12:00:00 AM	11:59:59 PM	13.47968133	10.75423449
21/05/2023	21	Plant Room	12:00:00 AM	11:59:59 PM	6.375485516	5.01480903
22/05/2023	22	Plant Room	12:00:00 AM	11:59:59 PM	10.77564391	8.376621533
23/05/2023	23	Plant Room	12:00:00 AM	11:59:59 PM	17.81807543	13.26117578
24/05/2023	24	Plant Room	12:00:00 AM	11:59:59 PM	17.03654675	12.36403025
25/05/2023	25	Plant Room	12:00:00 AM	11:59:59 PM	16.02626889	11.92257841
26/05/2023	26	Plant Room	12:00:00 AM	11:59:59 PM	9.844949241	6.191790488
27/05/2023	27	Plant Room	12:00:00 AM	11:59:59 PM	5.333567908	3.358792729
28/05/2023	28	Plant Room	12:00:00 AM	11:59:59 PM	8.988353774	7.041786712
29/05/2023	29	Plant Room	12:00:00 AM	11:59:59 PM	6.098643088	4.934382069
30/05/2023	30	Plant Room	12:00:00 AM	11:59:59 PM	7.142226326	5.143592007
31/05/2023	31	Plant Room	12:00:00 AM	11:59:59 PM	12.58708918	9.916460388