

52 Avenue Road, London NW8 6HP

Air Quality Monitoring Report Report 26019.1

Wednesday 25 January 2023 to Friday 24 February 2023

**Domvs London (Global Holdings) Ltd
22 Wycombe End,
Beaconsfield,
Buckinghamshire,
United Kingdom HP9 1NB**

Report 26019.1			
Revision History			
First Issue Date: 03/03/2023			
A		D	
B		E	
C		F	
Written by:		Checked by:	
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Appendix B	Maximum Air Particulate Levels
Appendix C	Air Particle Level Statistics
Appendix D	Monitoring Site Plan

EXECUTIVE SUMMARY

KP Monitoring Ltd has been commissioned to monitor the air quality levels at the 52 Avenue Road site, 52 Avenue Road, St Johns Wood, London NW8 6HP.

Air quality levels have been measured at 4 No. positions around the development site. The measured parameters include PM2.5 particulate, PM10 particulate.

The following dust level exceedances were recorded across the development site during the monitoring period.

Position	Trigger Level Exceedances	Action Level Exceedances	Data Capture Rate
Position 1	0	0	97%
Position 2	0	0	90%
Position 3	0	0	72%
Position 4	0	0	97%

Table 1 Recorded exceedance events at the development site

The results are presented herein.

1.0 INTRODUCTION

KP Monitoring Ltd have been appointed by Domvs London (Global Holdings) Ltd to monitor the ongoing air quality levels from the site at 52 Avenue Road, and to present the results within baseline monthly reports.

This report details the procedures employed and the data obtained during the monitoring period spanning Wednesday 25 January 2023 to Friday 24 February 2023.

2.0 SITE DESCRIPTION

The monitoring site is located within the London Borough of Camden's jurisdiction. It is bounded by Elsworthy Road to the north, Elsworthy Road to the west, residential properties to the south, and large residential landscapes to the east.

3.0 SITE WORKING HOURS

It is our understanding that no works are currently taking place at the development site. Once work commence, however, we understand that works shall take place between the following hours. These daytime periods shall hereby be referred to as the 'Working Day'.

Day	Start time	End Time
Monday	08:00	18:00
Tuesday	08:00	18:00
Wednesday	08:00	18:00
Thursday	08:00	18:00
Friday	08:00	18:00
Saturday	08:00	13:00
Sunday	No Work	No Work

Table 2 Site working hours referred to as 'Working Day'

4.0 INSTALLED EQUIPMENT

Air quality monitoring equipment was installed at the 52 Avenue Road site, and has been continuously serviced, calibrated, and maintained, since Wednesday, 25 January 2023. The following equipment is currently installed:

Position	Manufacturer	Model	Serial
Position 1	Earthsense	Zephyr	1149
Position 2	Earthsense	Zephyr	1169
Position 3	Earthsense	Zephyr	948
Position 4	Earthsense	Zephyr	1043

Table 3 Installed sensor details

Each of the installed air quality monitoring sensors is equipped with a data logger and modem, and is protected from the elements with an environmental kit.

5.0 MONITORING POSITIONS

Air quality monitoring sensors have been installed at 4No. positions around the development site. See site plan in Appendix D. The following table describes these positions.

Position	Monitoring Position
Position 1	The monitor is situated adjacent to Elsworthy Road at an approximate height of 2.5 metres.
Position 2	The monitor is situated adjacent to Elsworthy Road on the north western area of site and is at an approximate height of 2.5 metres.
Position 3	The monitor is situated on the south eastern area of site and is at an approximate height of 1 metre.
Position 4	The monitor is situated on the north eastern area of site and is at an approximate height of 1 metre.

Table 4 Description of monitoring positions

The above positions were recommended and approved by Camden Council as demonstrated in the attached email chain.

6.0 METHODOLOGY

Fully automated air quality monitoring has been undertaken at the 52 Avenue Road site, from Wednesday 25 January 2023 to Friday 24 February 2023.

The air quality monitors are sensitive to airborne particle concentrations down to a fraction of a microgram per cubic metre and provide detailed air quality measurements in real-time. A dedicated microprocessor analyses individual particles even if there are millions per litre.

7.0 AIR PARTICULATE (DUST)

7.1 Measured Particulates

Fully automated dust monitoring has been undertaken to measure PM2.5, and PM10 particulate at the 52 Avenue Road site.

7.2 Project Trigger & Action Levels

It is our understanding that there are currently no defined air particulate Trigger and Action levels for this project.

Position	Trigger Level (PM10, $\mu\text{g}/\text{m}^3$, 15min)	Action Level (PM10, $\mu\text{g}/\text{m}^3$, 15min)
Position 1	N/A	N/A
Position 2	N/A	N/A
Position 3	N/A	N/A
Position 4	N/A	N/A

Table 5 Defined Trigger and Action levels at the development site

The following contacts are current recipients of the above alerts by email and/or SMS.

Recipient Name	Organisation
max.obrien@domvslondon.com	Domvs London (Global Holdings) Ltd

Table 6 Trigger and Action alert recipients

7.3 Air Particulate Monitoring Results

The measured dust levels are shown in Appendix B and the associated graphs. The following dust level exceedances were recorded across the development site during the monitoring period.

Position	Trigger Level Exceedances	Action Level Exceedances	Data Capture Rate
Position 1	N/A	N/A	97%
Position 2	N/A	N/A	90%
Position 3	N/A	N/A	72%
Position 4	N/A	N/A	97%

Table 7 Recorded exceedance events at the development site

The following contacts are current recipients of the above alerts by email and/or SMS.

Recipient Name	Organisation
max.obrien@domvslondon.com	Domvs London (Global Holdings) Ltd

Table 8 Trigger and Action alert recipients

8.0 DISCUSSION

Environmental air quality monitoring has been undertaken at the 52 Avenue Road site, during the period spanning Wednesday 25 January 2023 to Friday 24 February 2023.

The results are presented herein.

Unfortunately, we are unable to present complete data for the monitoring period pertaining to Position 2 and Position 3 owing to suboptimal sunlight conditions with regards to each monitor's associated solar panel. As these periods were overnight i.e. no sunlight, data has been captured for the daytime future site-working hours.

An external battery solution was implemented to boost each dust monitors battery capacity. Installation of said battery solutions was completed successfully and measurements were attained for the remainder of the monitoring period without any intermittency issues.

Site were made aware.

APPENDIX A – AIR QUALITY TERMINOLOGY

PM_x Particulate Matter

Used as a measurement of air particles where x is the size of the particle measured in micrometres (or μm). PM₁₀ describes inhalable particles, with diameters that are 10 micrometres and smaller. Sources include crushing or grinding operations and dust stirred up by vehicles on roads. PM_{2.5} describes fine particles that are 2.5 micrometres or smaller in diameter and can only be seen with an electron microscope and are able to penetrate to the lungs. Typical sources include all types of combustion, including motor vehicles, power plants and agricultural burning. PM₁ describes particles that are 1 micrometre or smaller in diameter.

TSP Total Suspended Particles

Used as a measure of the mass concentration of particulate matter in the air. TSP covers the full range of particle sizes and is commonly measured alongside PM₁₀ and PM_{2.5}.

Nephelometer

Sometimes referred to as a turbidimeter, these devices are used to measure the concentration of particulates suspended in a fluid. Suspended particulates are measured by employing a light beam and a light detector set to one side (often 90°) of the source beam. Particle density is then a function of the light reflected into the detector from the particles.

APPENDIX B – MAXIMUM P2.5/PM10 LEVELS

The following table presents the maximum PM2.5 levels measured during the period Wednesday 25 January 2023 to Friday 24 February 2023.

Date	Position 1	Position 2	Position 3	Position 4
25/01/2023	26	36	-	23
26/01/2023	8	14	-	7
27/01/2023	4	7	-	4
28/01/2023	15	25	-	16
29/01/2023	No Work	No Work	No Work	No Work
30/01/2023	4	-	-	4
31/01/2023	4	-	-	4
01/02/2023	14	8	4	4
02/02/2023	24	9	3	3
03/02/2023	40	7	4	5
04/02/2023	37	12	7	5
05/02/2023	No Work	No Work	No Work	No Work
06/02/2023	20	32	20	19
07/02/2023	27	38	47	26
08/02/2023	27	41	47	27
09/02/2023	26	37	27	22
10/02/2023	25	36	30	25

Date	Position 1	Position 2	Position 3	Position 4
11/02/2023	7	12	36	6
12/02/2023	No Work	No Work	No Work	No Work
13/02/2023	37	39	41	19
14/02/2023	33	54	45	36
15/02/2023	42	64	39	36
16/02/2023	5	10	5	6
17/02/2023	2	6	2	2
18/02/2023	2	5	2	1
19/02/2023	No Work	No Work	No Work	No Work
20/02/2023	4	8	4	5
21/02/2023	14	25	13	12
22/02/2023	20	33	19	20
23/02/2023	3	16	25	3
24/02/2023	11	20	11	10

Table 9 Measured maximum PM2.5 levels at the development site

The following table presents the 24-hour mean average PM2.5 levels measured during the period Wednesday 25 January 2023 to Friday 24 February 2023.

Date	Position 1	Position 2	Position 3	Position 4
25/01/2023	26	32	-	21
26/01/2023	4	7	-	4
27/01/2023	4	8	-	4
28/01/2023	10	17	-	10
29/01/2023	No Work	No Work	No Work	No Work
30/01/2023	5	-	-	4
31/01/2023	4	-	-	4
01/02/2023	4	7	4	4
02/02/2023	3	5	2	3
03/02/2023	6	7	3	3
04/02/2023	5	13	7	4
05/02/2023	No Work	No Work	No Work	No Work
06/02/2023	11	18	10	9
07/02/2023	19	28	18	15
08/02/2023	25	36	23	20
09/02/2023	18	27	10	12
10/02/2023	16	24	10	11

Date	Position 1	Position 2	Position 3	Position 4
11/02/2023	8	14	12	7
12/02/2023	No Work	No Work	No Work	No Work
13/02/2023	21	34	19	16
14/02/2023	27	41	25	24
15/02/2023	24	38	23	22
16/02/2023	4	7	3	4
17/02/2023	3	7	3	3
18/02/2023	2	6	2	2
19/02/2023	No Work	No Work	No Work	No Work
20/02/2023	4	8	4	4
21/02/2023	11	18	10	10
22/02/2023	15	24	14	14
23/02/2023	4	8	4	4
24/02/2023	6	12	6	6

Table 10 Measured 24-hour mean average PM2.5 levels at the development site

The following table presents the maximum PM10 levels measured during the period Wednesday 25 January 2023 to Friday 24 February 2023.

Date	Position 1	Position 2	Position 3	Position 4
25/01/2023	41	41	-	40
26/01/2023	13	15	-	13
27/01/2023	8	8	-	8
28/01/2023	23	28	-	24
29/01/2023	No Work	No Work	No Work	No Work
30/01/2023	7	-	-	7
31/01/2023	8	-	-	8
01/02/2023	19	9	11	10
02/02/2023	28	10	7	8
03/02/2023	44	7	7	8
04/02/2023	41	14	11	38
05/02/2023	No Work	No Work	No Work	No Work
06/02/2023	30	33	30	30
07/02/2023	40	42	50	41
08/02/2023	46	52	51	43
09/02/2023	40	43	40	37
10/02/2023	38	40	42	41
11/02/2023	11	13	40	11

Date	Position 1	Position 2	Position 3	Position 4
12/02/2023	No Work	No Work	No Work	No Work
13/02/2023	53	46	49	33
14/02/2023	55	67	50	52
15/02/2023	57	66	57	53
16/02/2023	9	11	9	9
17/02/2023	3	6	4	3
18/02/2023	4	6	4	3
19/02/2023	No Work	No Work	No Work	No Work
20/02/2023	7	8	7	8
21/02/2023	20	27	20	19
22/02/2023	32	37	31	33
23/02/2023	5	17	38	6
24/02/2023	16	22	18	17

Table 11 Measured maximum PM10 levels at the development site

The following table presents the 24-hour mean average PM10 levels measured during the period Wednesday 25 January 2023 to Friday 24 February 2023.

Date	Position 1	Position 2	Position 3	Position 4
25/01/2023	42	38	-	39
26/01/2023	8	8	-	8
27/01/2023	6	8	-	7
28/01/2023	12	15	-	12
29/01/2023	No Work	No Work	No Work	No Work
30/01/2023	6	-	-	7
31/01/2023	7	-	-	7
01/02/2023	6	8	7	8
02/02/2023	5	6	6	5
03/02/2023	7	6	5	5
04/02/2023	9	17	14	8
05/02/2023	No Work	No Work	No Work	No Work
06/02/2023	14	18	16	15
07/02/2023	26	29	27	24
08/02/2023	40	42	37	34
09/02/2023	28	32	16	17
10/02/2023	27	29	17	21

Date	Position 1	Position 2	Position 3	Position 4
11/02/2023	14	18	21	14
12/02/2023	No Work	No Work	No Work	No Work
13/02/2023	29	38	29	26
14/02/2023	44	48	42	39
15/02/2023	40	46	40	38
16/02/2023	6	8	6	7
17/02/2023	4	6	4	4
18/02/2023	3	6	3	3
19/02/2023	No Work	No Work	No Work	No Work
20/02/2023	5	7	6	6
21/02/2023	12	16	12	12
22/02/2023	26	31	26	27
23/02/2023	6	8	7	7
24/02/2023	11	15	12	12

Table 12 Measured 24-hour mean average PM10 levels at the development

APPENDIX C – PM10 Air Particulate Level Statistics for Wednesday 25 January 2023 to Friday 24 February 2023

The tables below present the PM10 monitoring statistics for working hours and non-working hours during the monitoring period.

Position	Mean Average PM10 Dust Level ($\mu\text{g}/\text{m}^3$)	Minimum PM10 Dust Level ($\mu\text{g}/\text{m}^3$)	Maximum PM0 Dust Level ($\mu\text{g}/\text{m}^3$)	Data Capture Rate
Position 1	15	2	57	97%
Position 2	18	5	67	90%
Position 3	15	3	57	72%
Position 4	14	3	53	97%

Table 13 Working Day PM10 dust level statistics

Position	Mean Average PM10 Dust Level ($\mu\text{g}/\text{m}^3$)	Minimum PM10 Dust Level ($\mu\text{g}/\text{m}^3$)	Maximum PM0 Dust Level ($\mu\text{g}/\text{m}^3$)
Position 1	18	3	97
Position 2	20	5	60
Position 3	13	3	57
Position 4	14	3	51

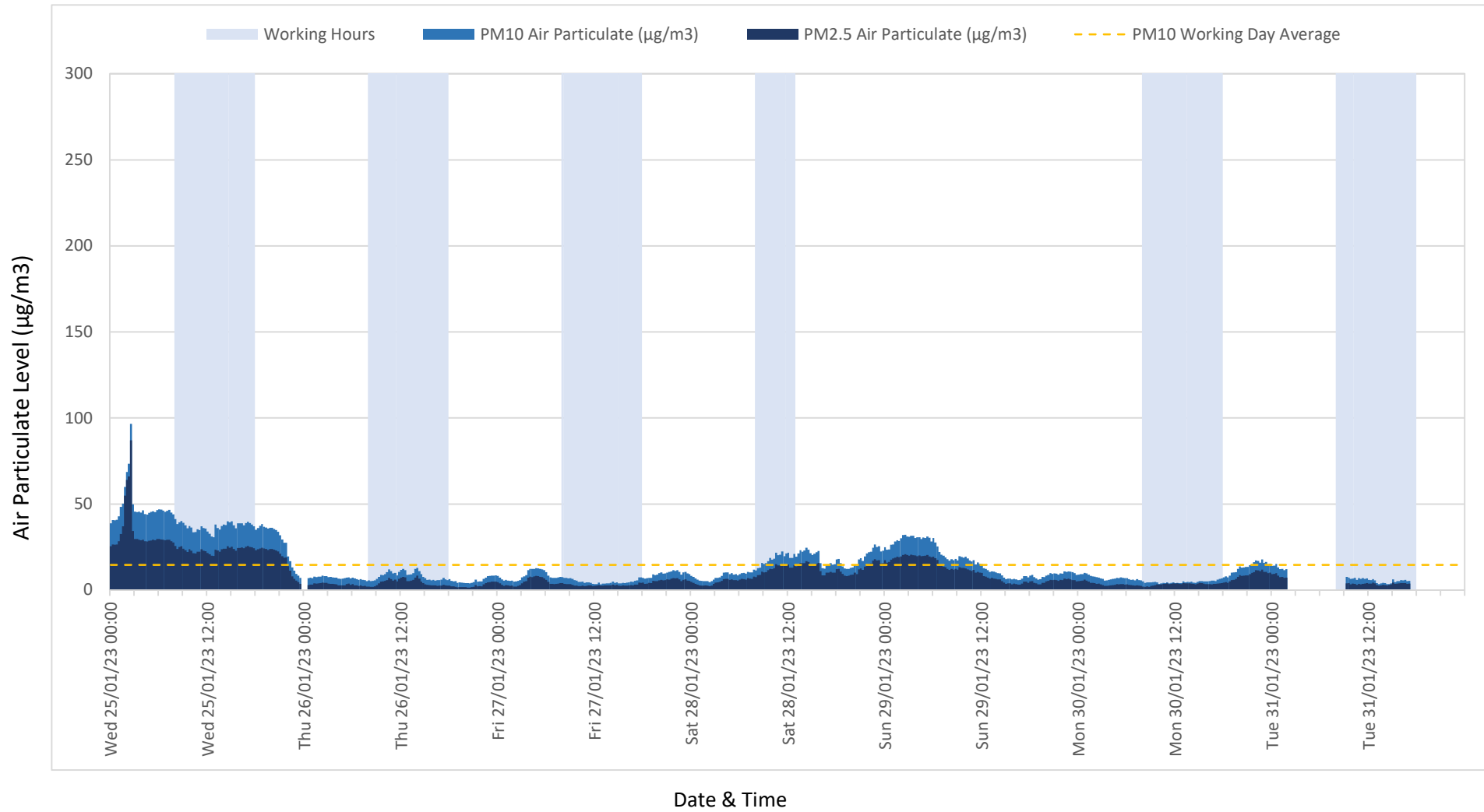
APPENDIX D – Environmental Monitoring Site Plan



52 Avenue Road

Position 1

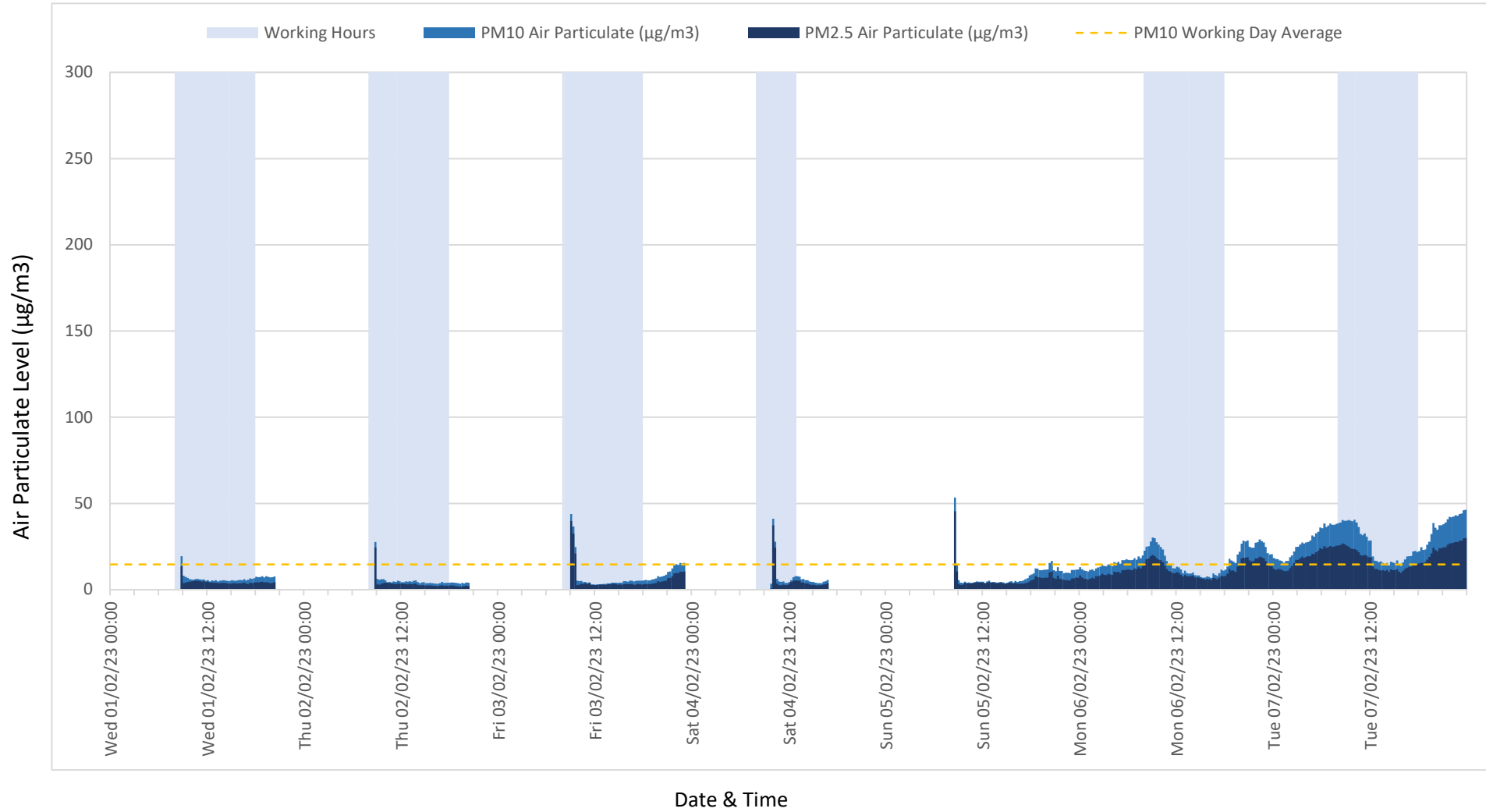
Wednesday 25/01/2023 to Tuesday 31/01/2023



52 Avenue Road

Position 1

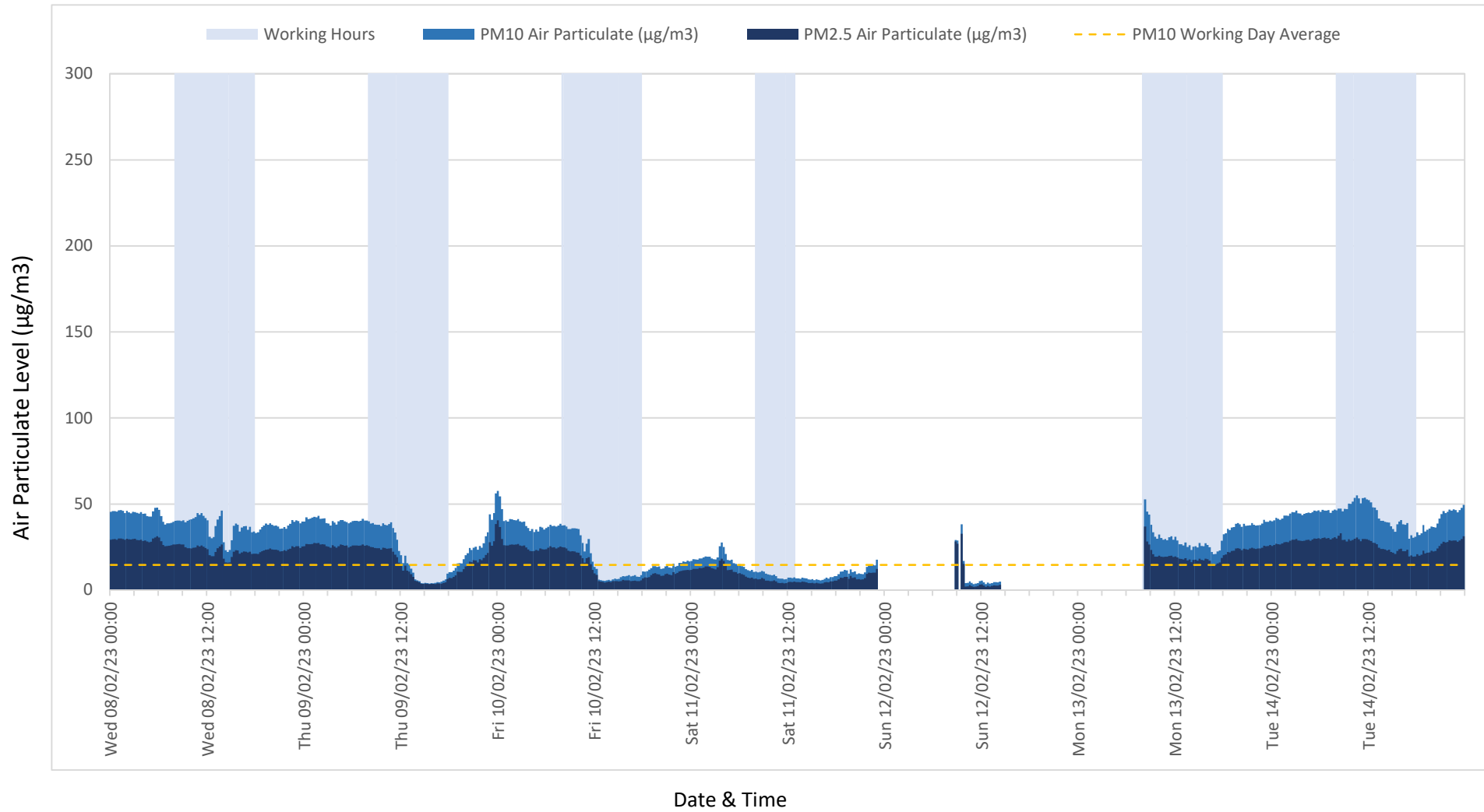
Wednesday 01/02/2023 to Tuesday 07/02/2023



52 Avenue Road

Position 1

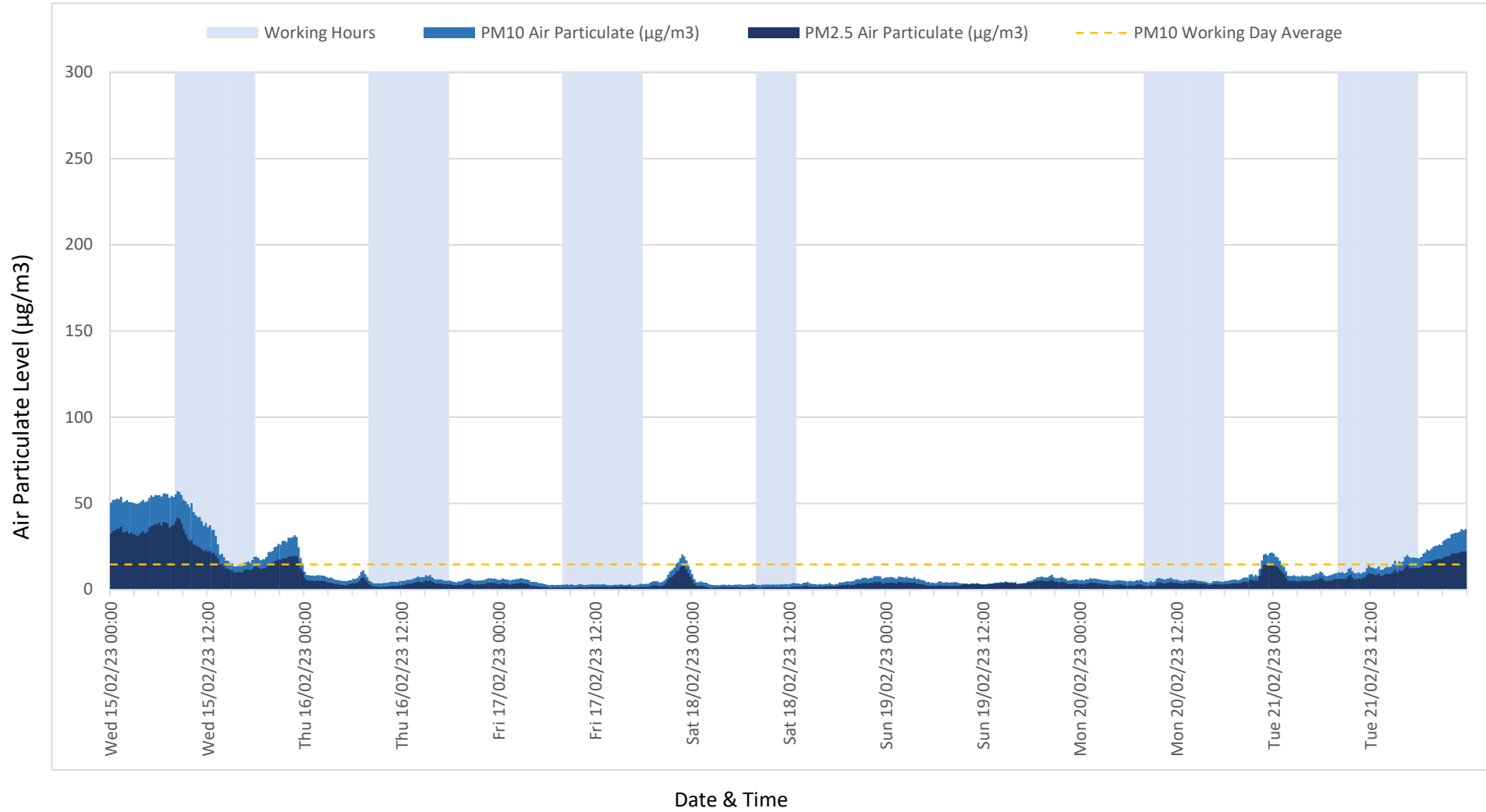
Wednesday 08/02/2023 to Tuesday 14/02/2023



52 Avenue Road

Position 1

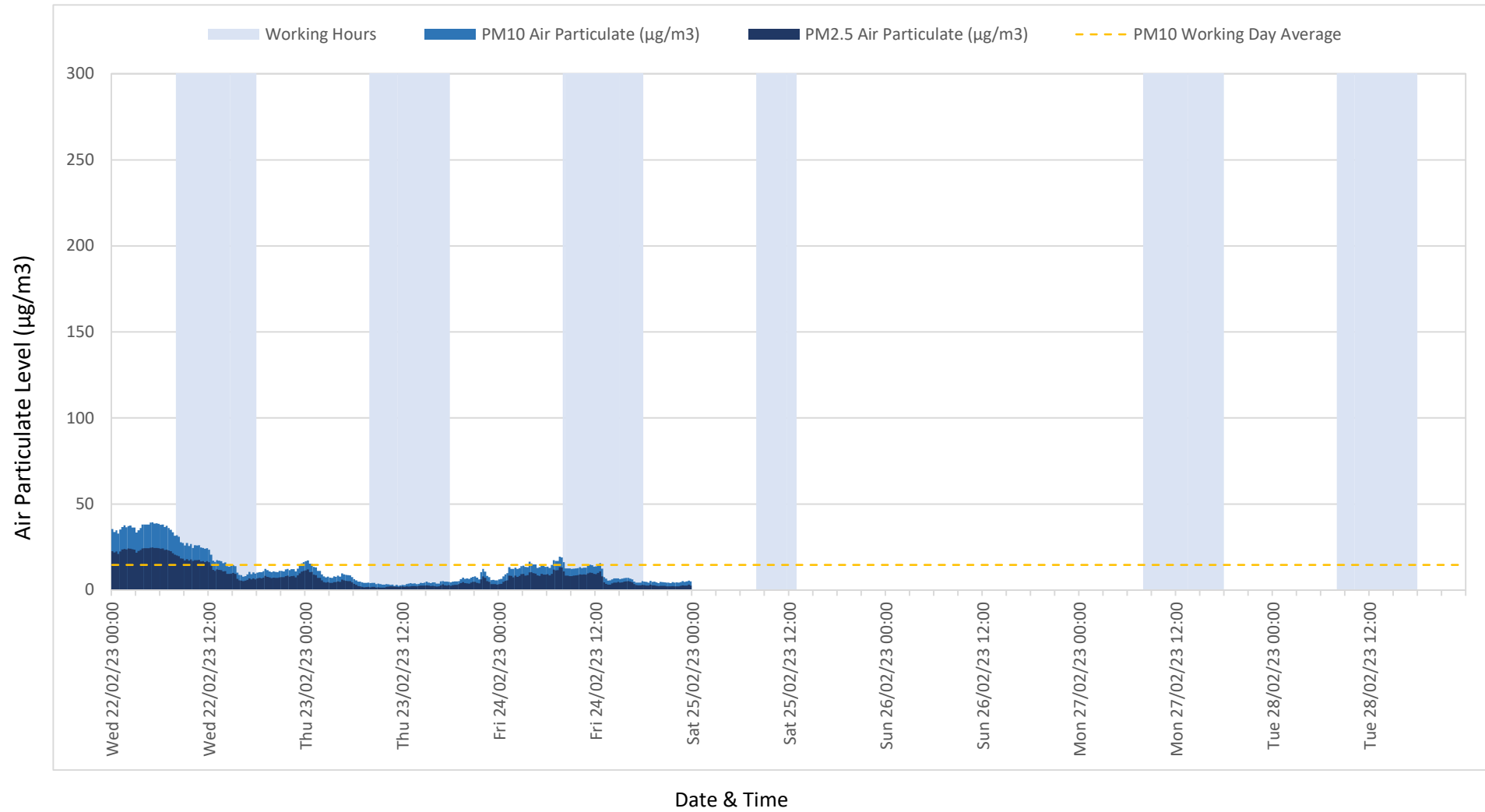
Wednesday 15/02/2023 to Tuesday 21/02/2023



52 Avenue Road

Position 1

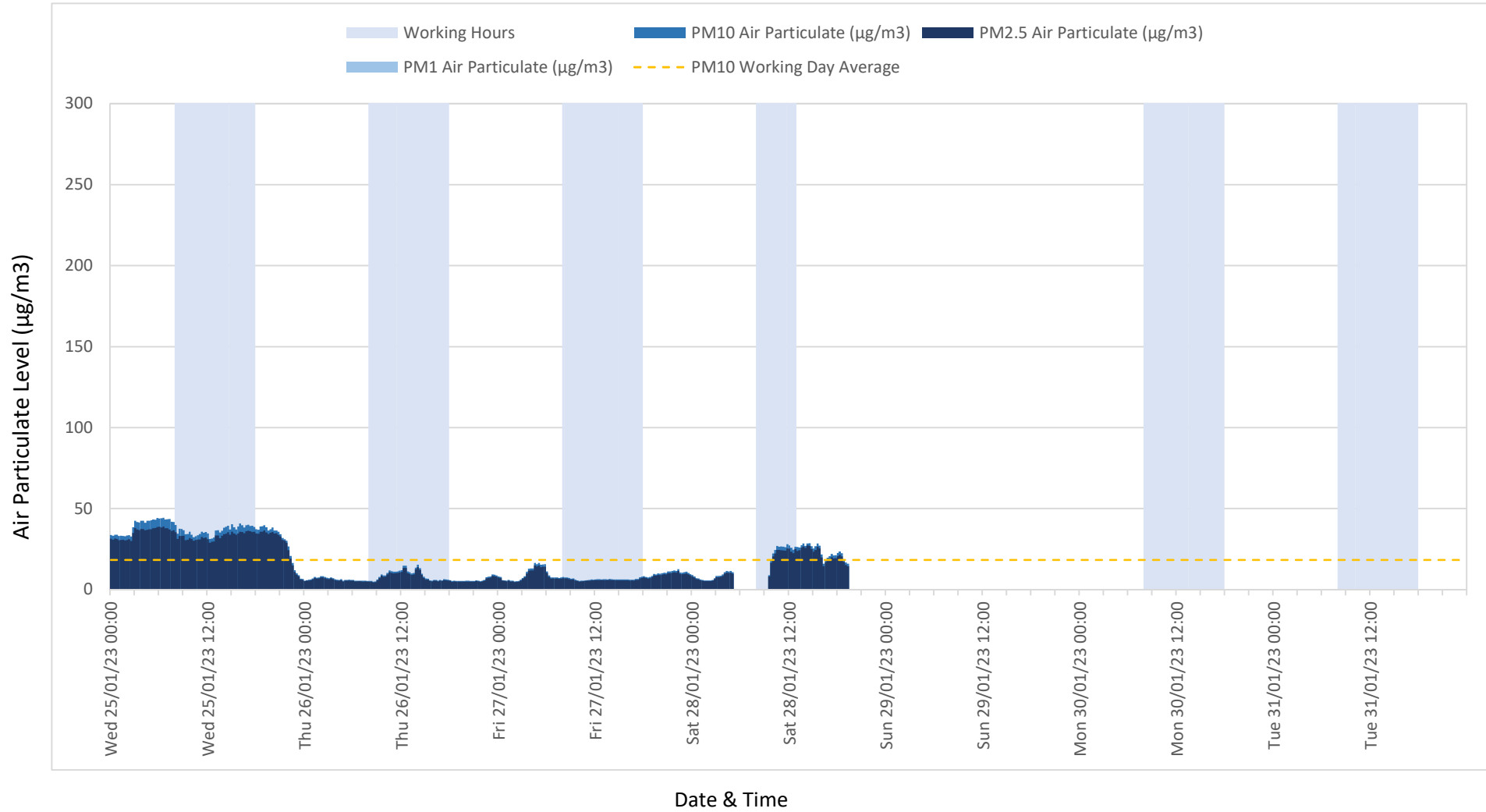
Wednesday 22/02/2023 to Tuesday 28/02/2023



52 Avenue Road

Position 2

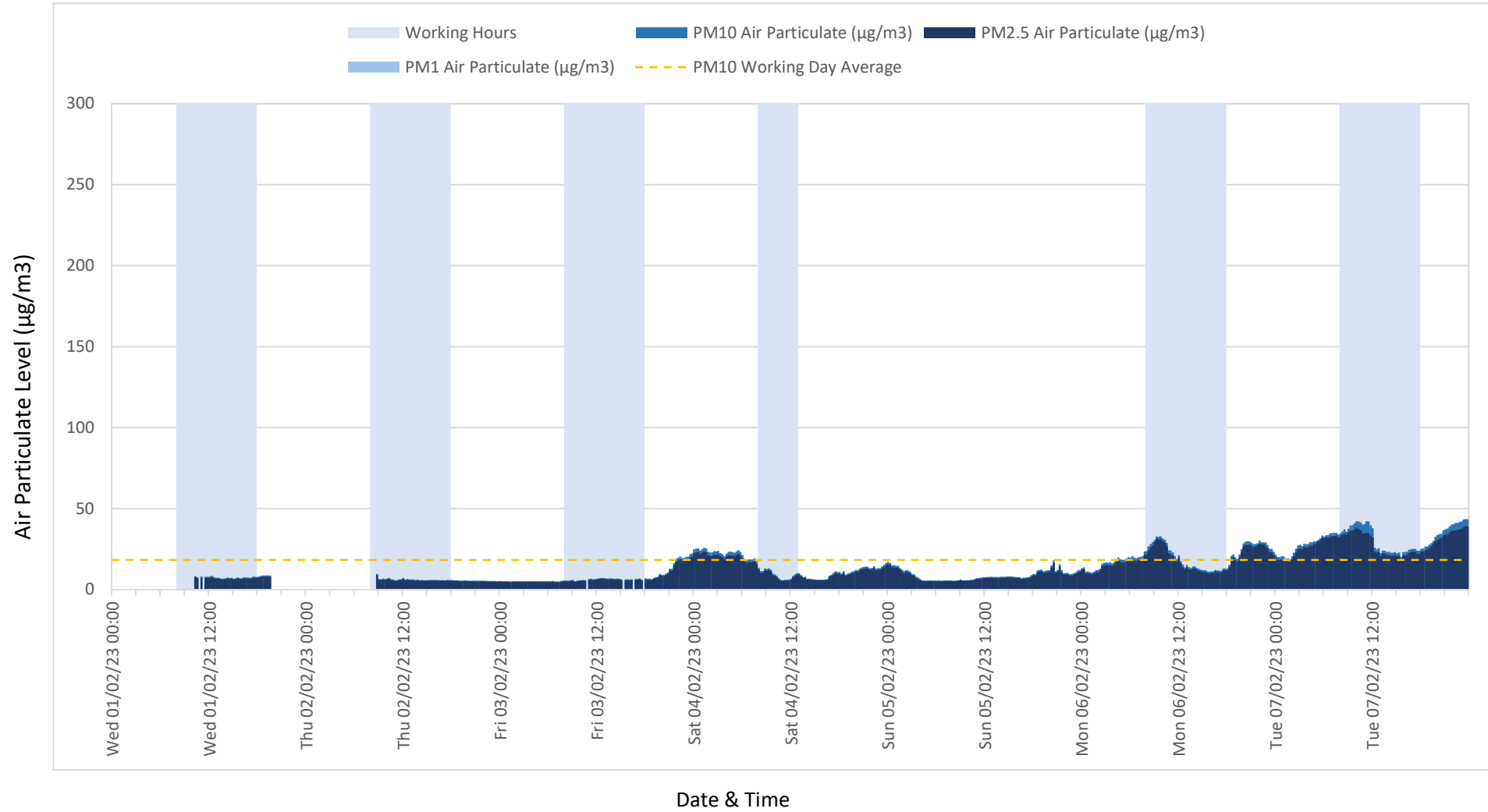
Wednesday 25/01/2023 to Tuesday 31/01/2023



52 Avenue Road

Position 2

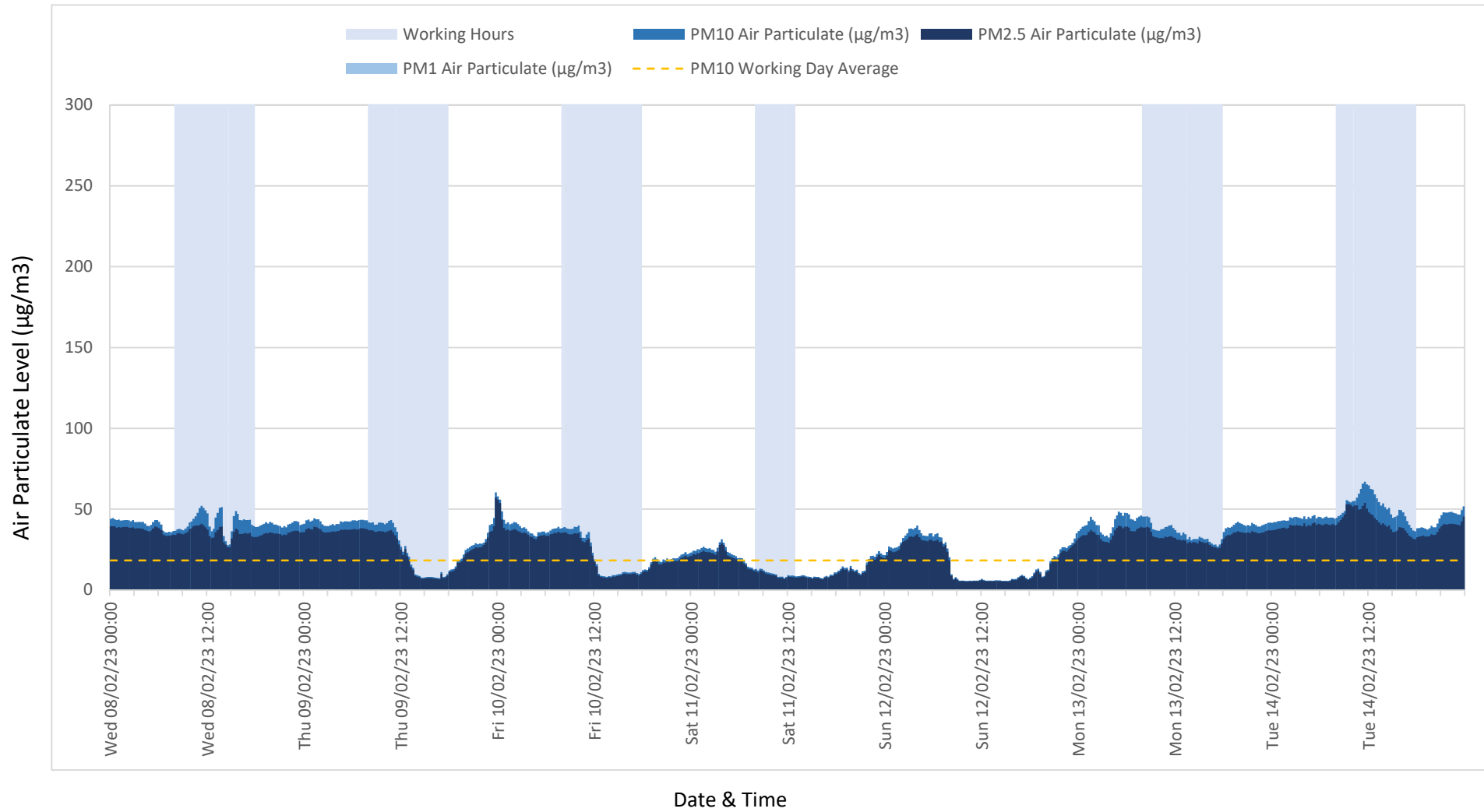
Wednesday 01/02/2023 to Tuesday 07/02/2023



52 Avenue Road

Position 2

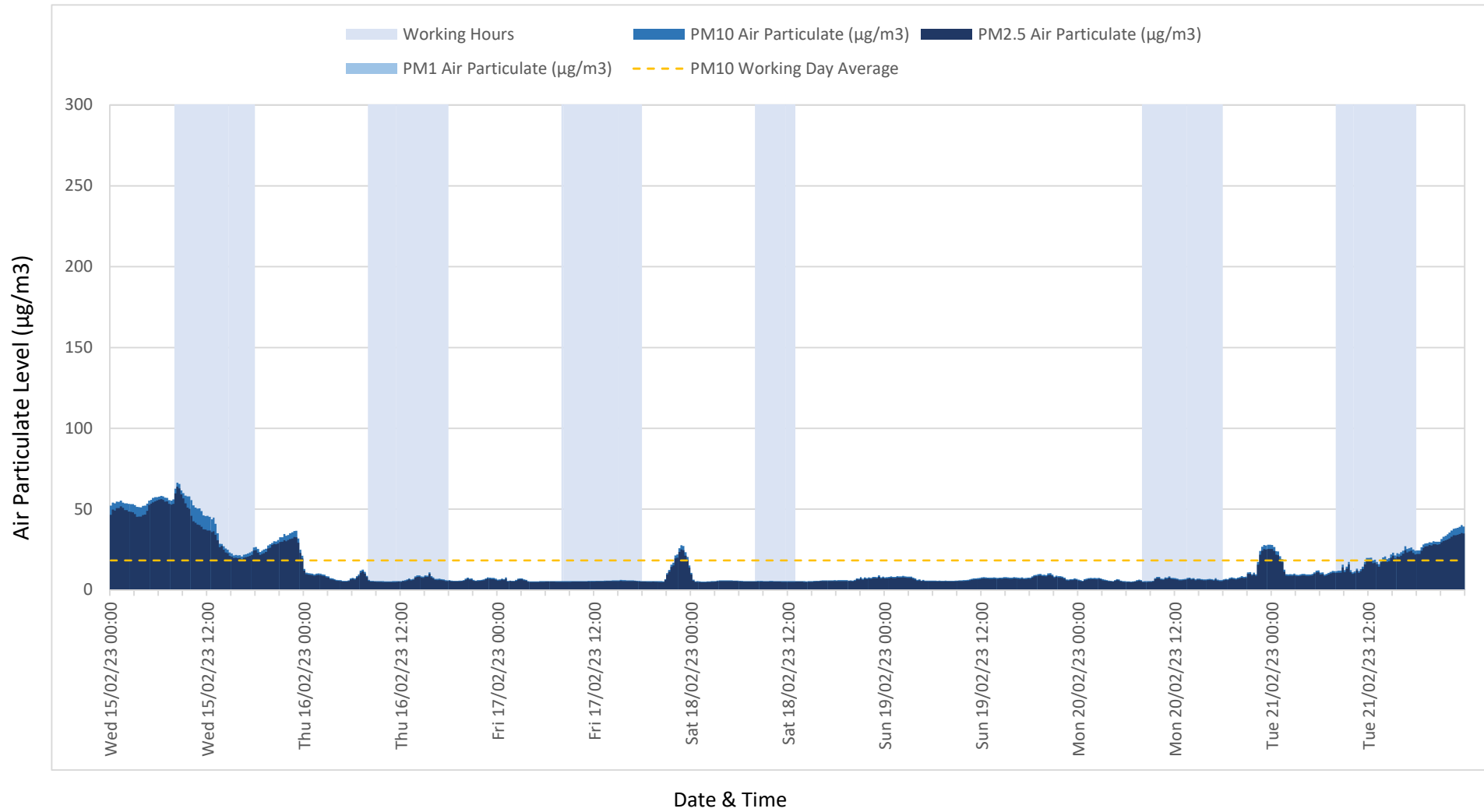
Wednesday 08/02/2023 to Tuesday 14/02/2023



52 Avenue Road

Position 2

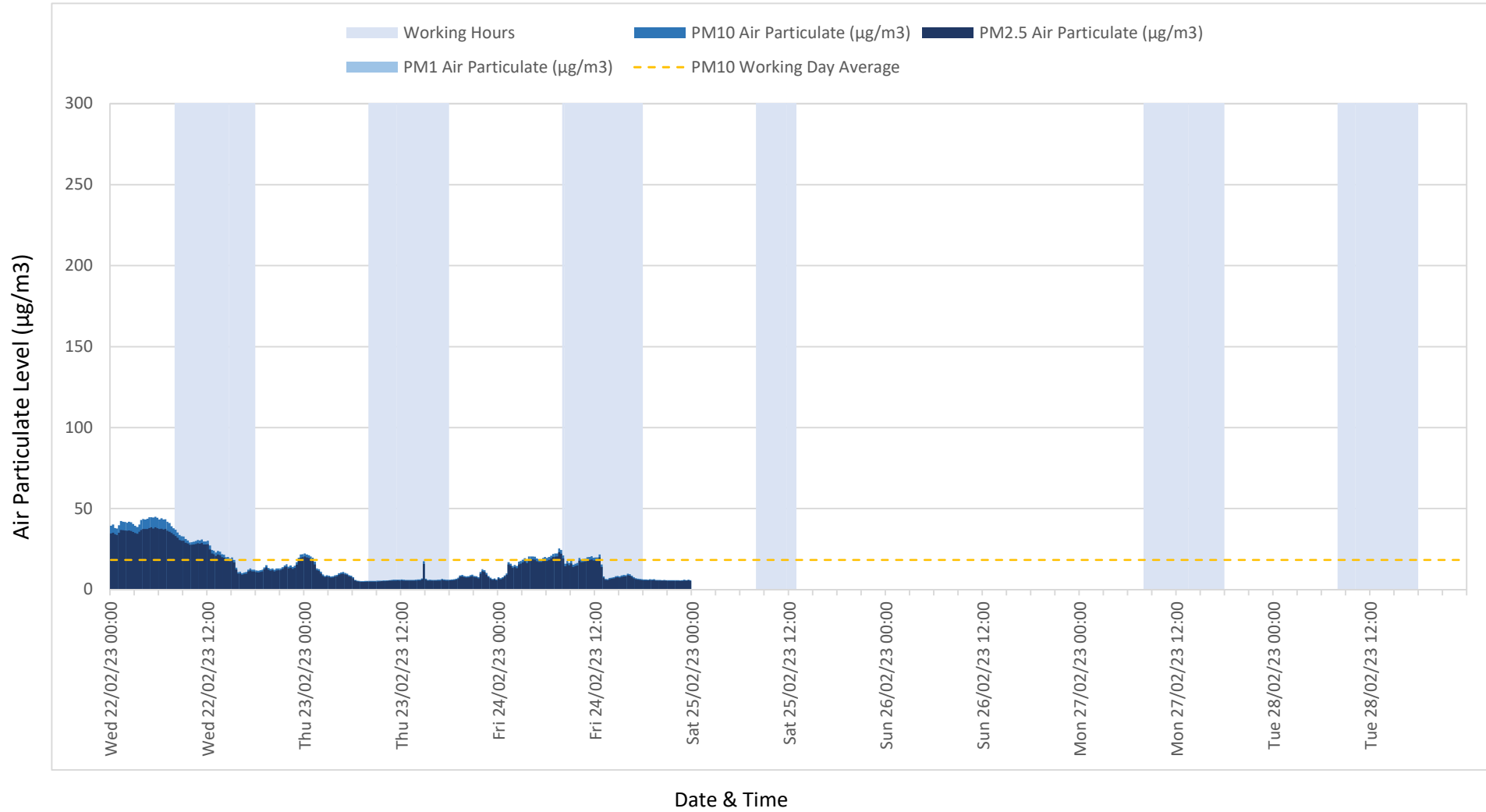
Wednesday 15/02/2023 to Tuesday 21/02/2023



52 Avenue Road

Position 2

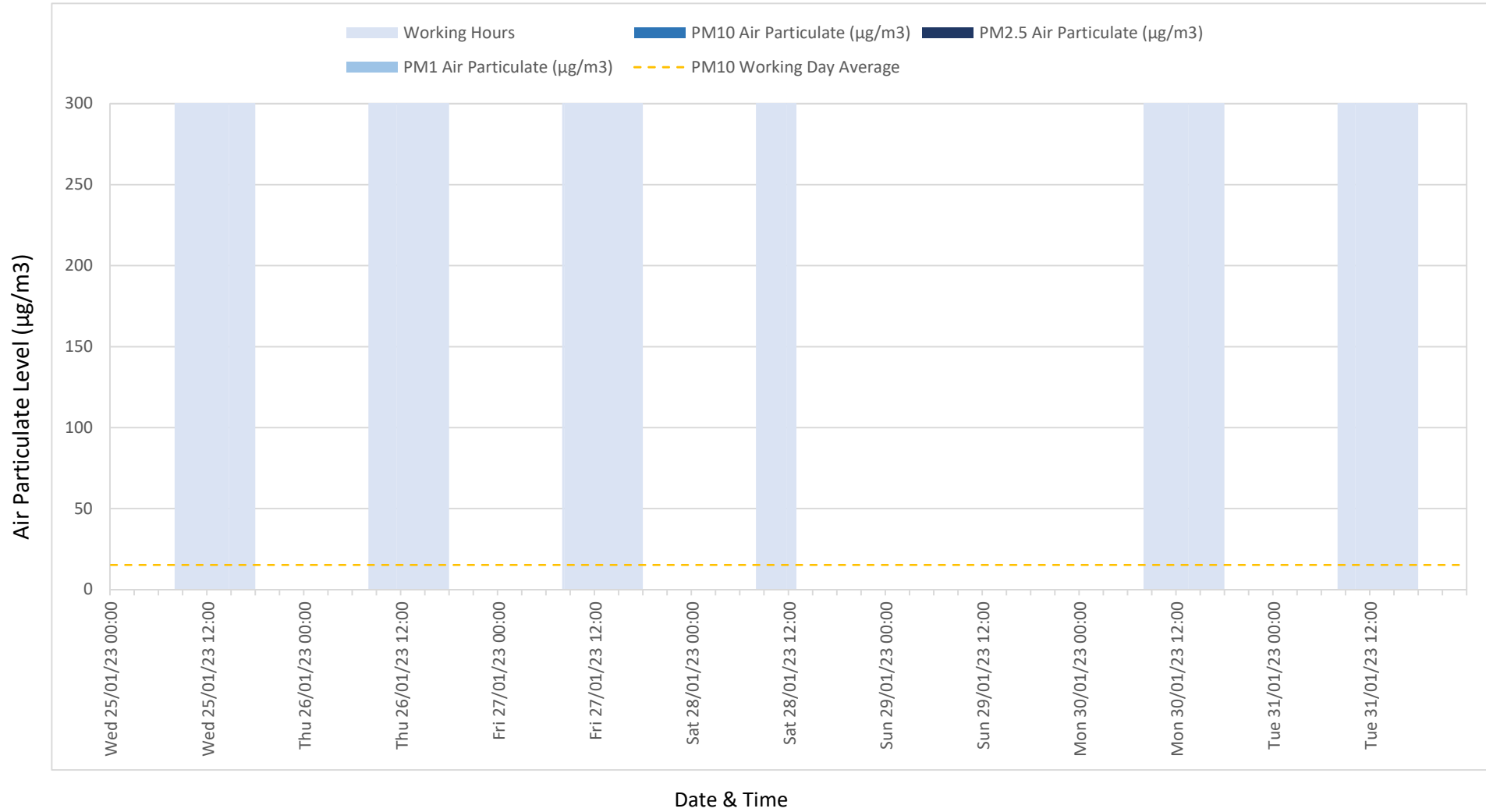
Wednesday 22/02/2023 to Tuesday 28/02/2023



52 Avenue Road

Position 3

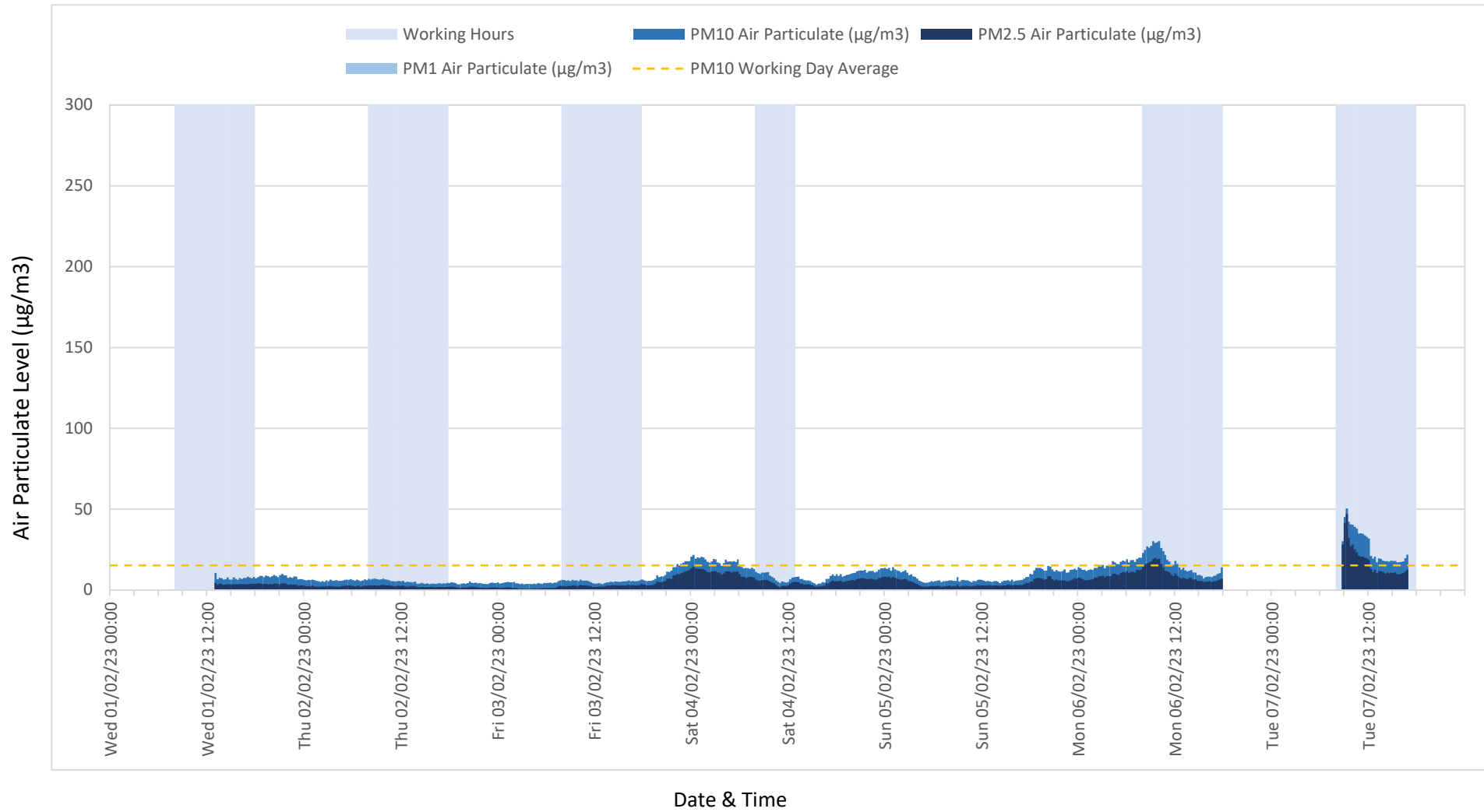
Wednesday 25/01/2023 to Tuesday 31/01/2023



52 Avenue Road

Position 3

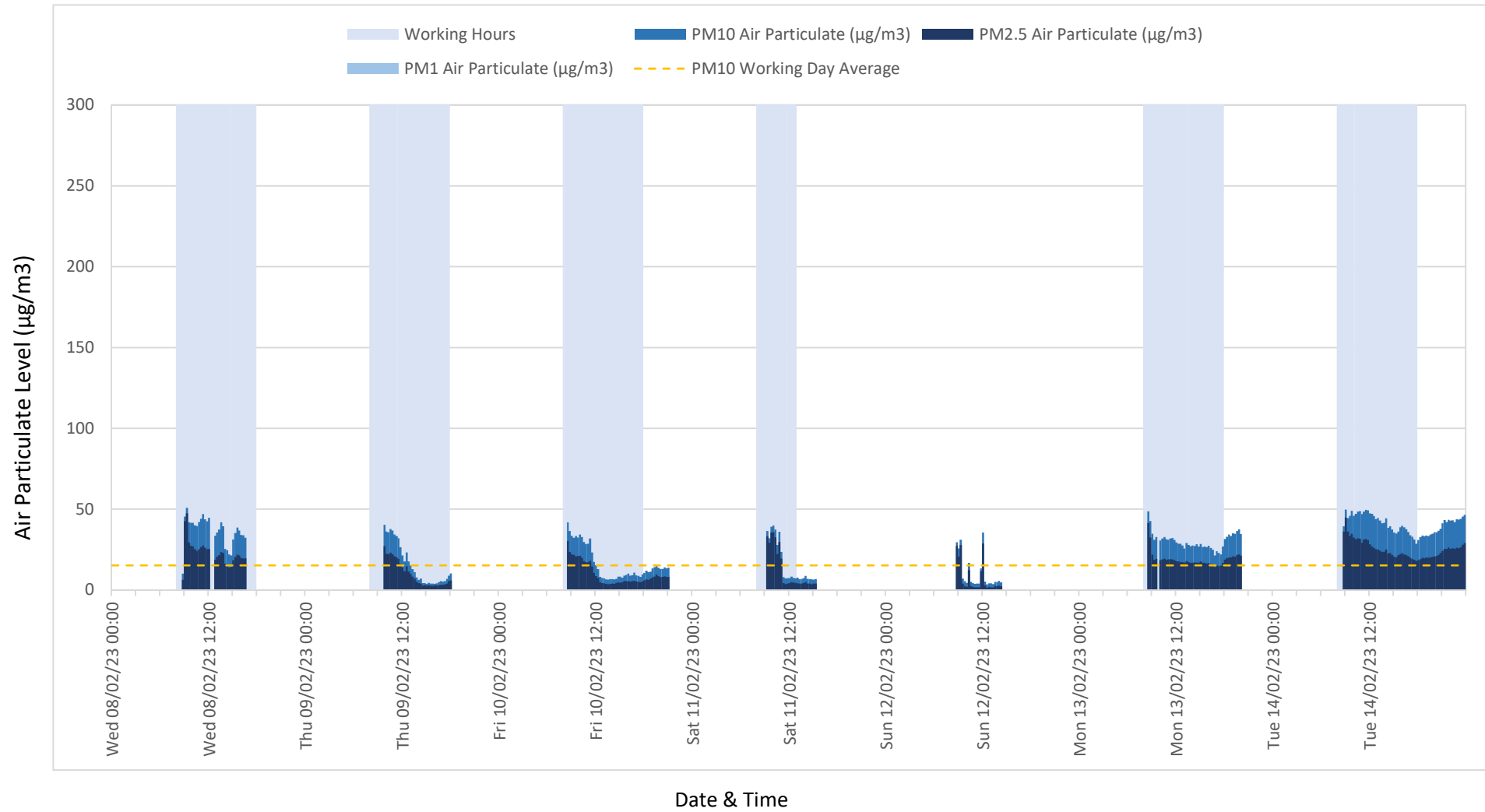
Wednesday 01/02/2023 to Tuesday 07/02/2023



52 Avenue Road

Position 3

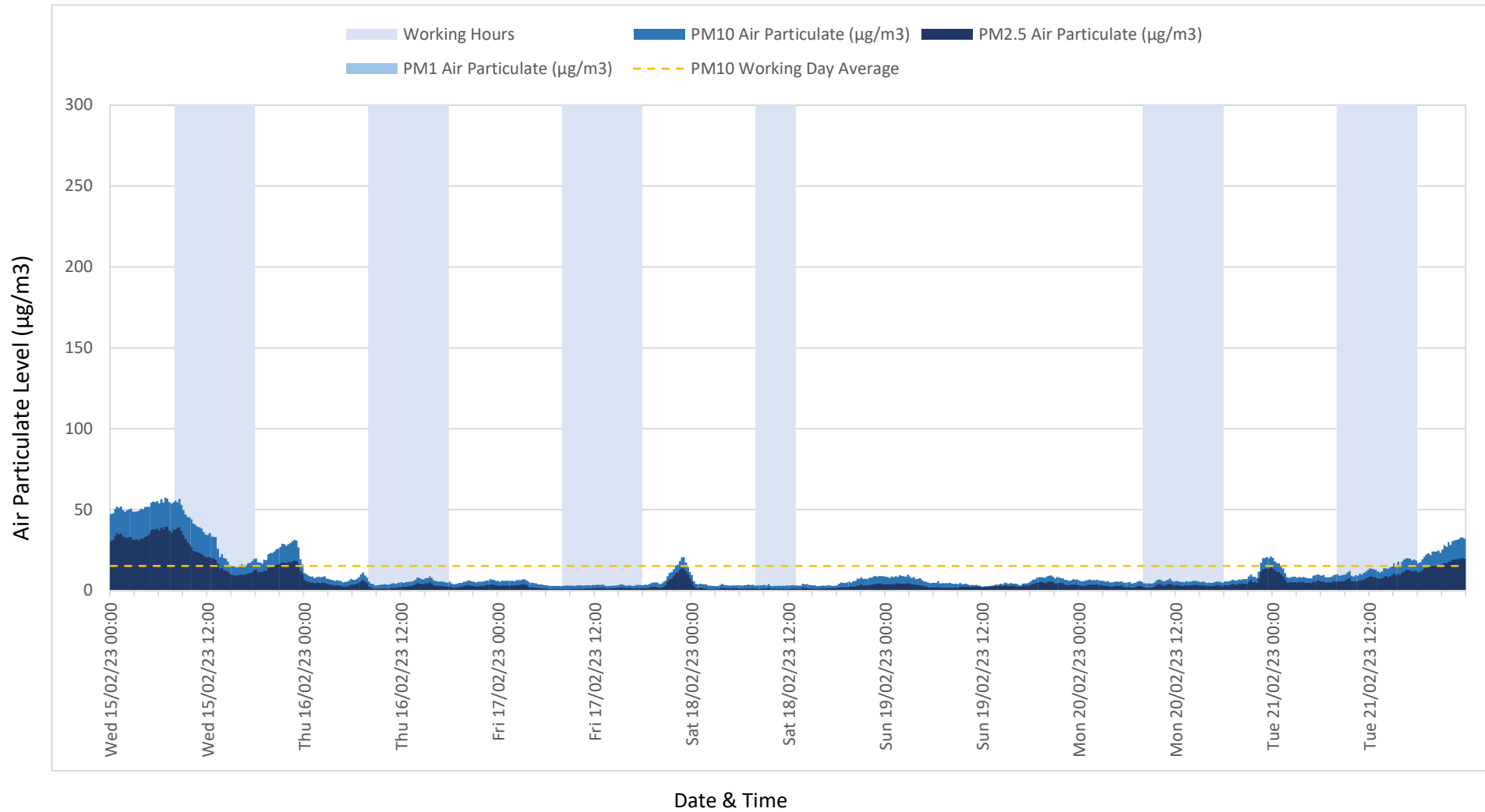
Wednesday 08/02/2023 to Tuesday 14/02/2023



52 Avenue Road

Position 3

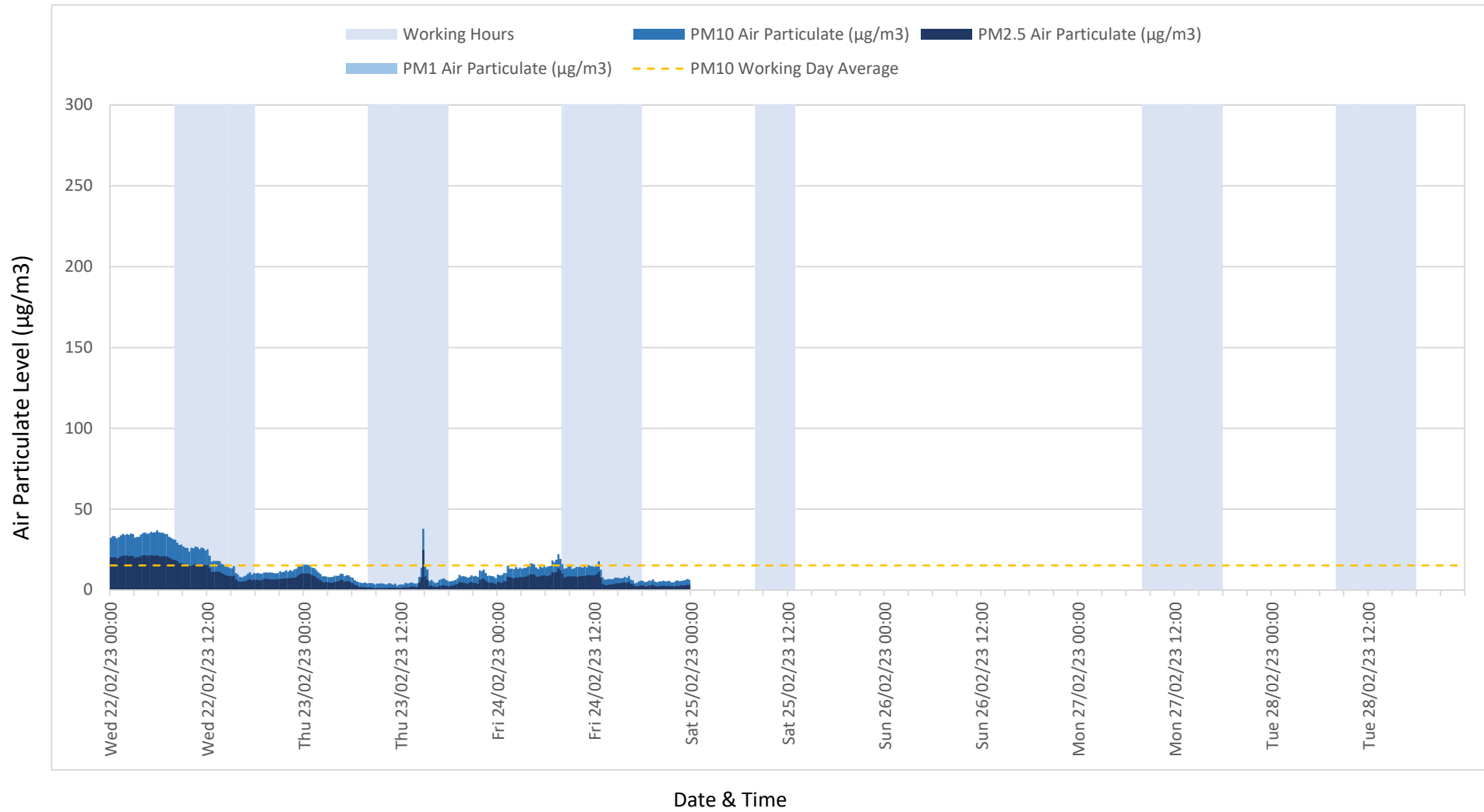
Wednesday 15/02/2023 to Tuesday 21/02/2023



52 Avenue Road

Position 3

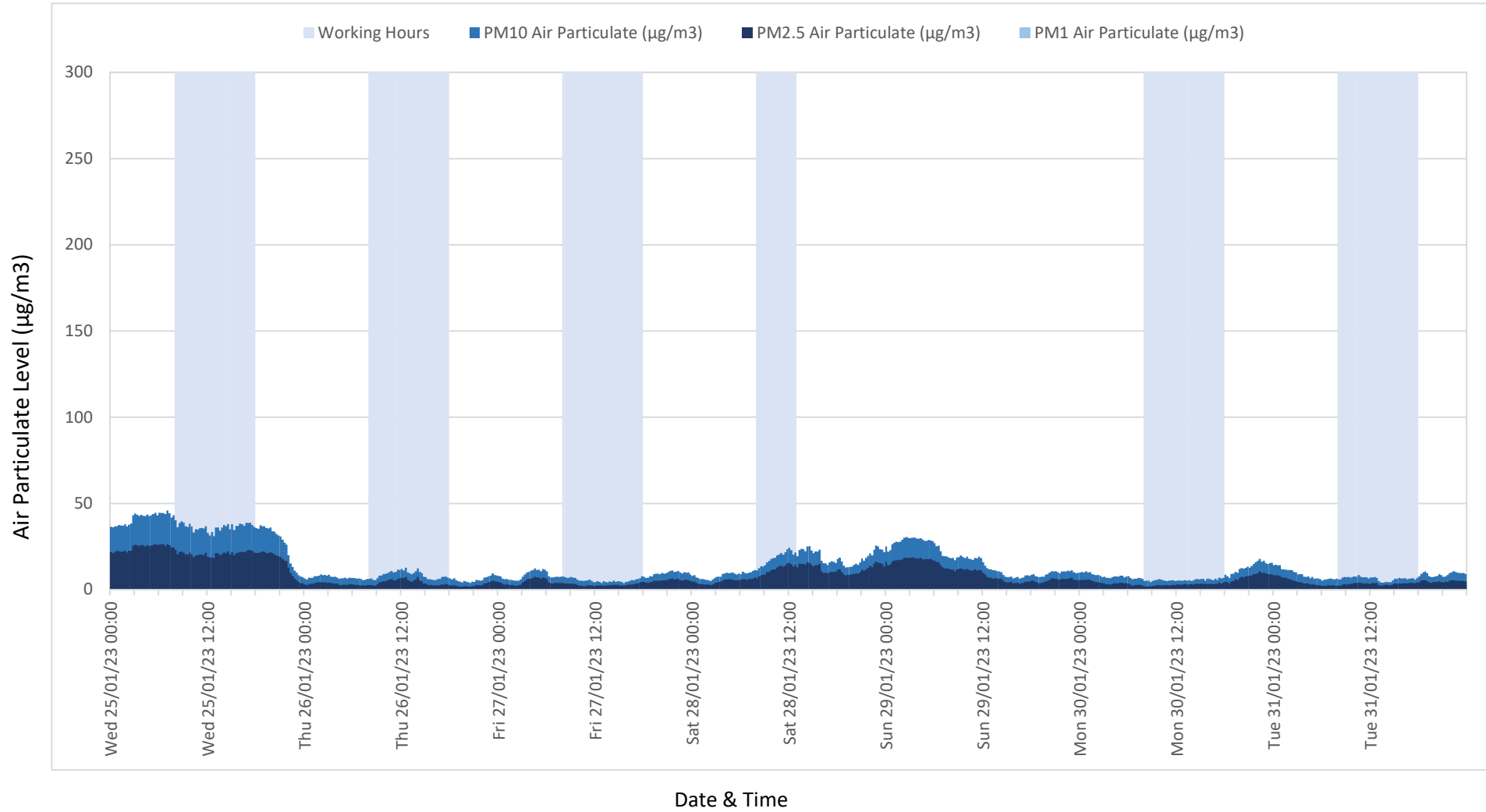
Wednesday 22/02/2023 to Tuesday 28/02/2023



52 Avenue Road

Position 4

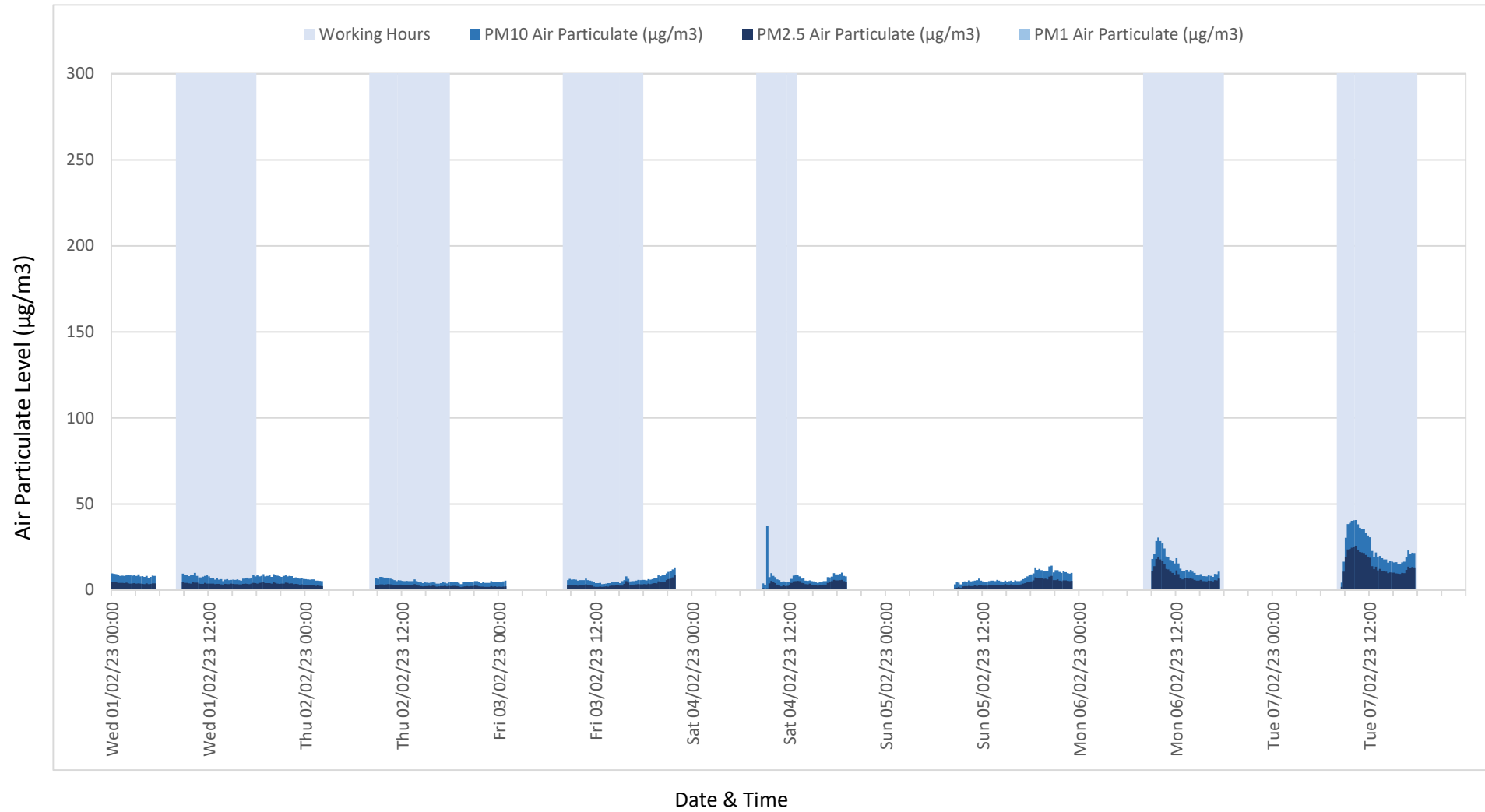
Wednesday 25/01/2023 to Tuesday 31/01/2023



52 Avenue Road

Position 4

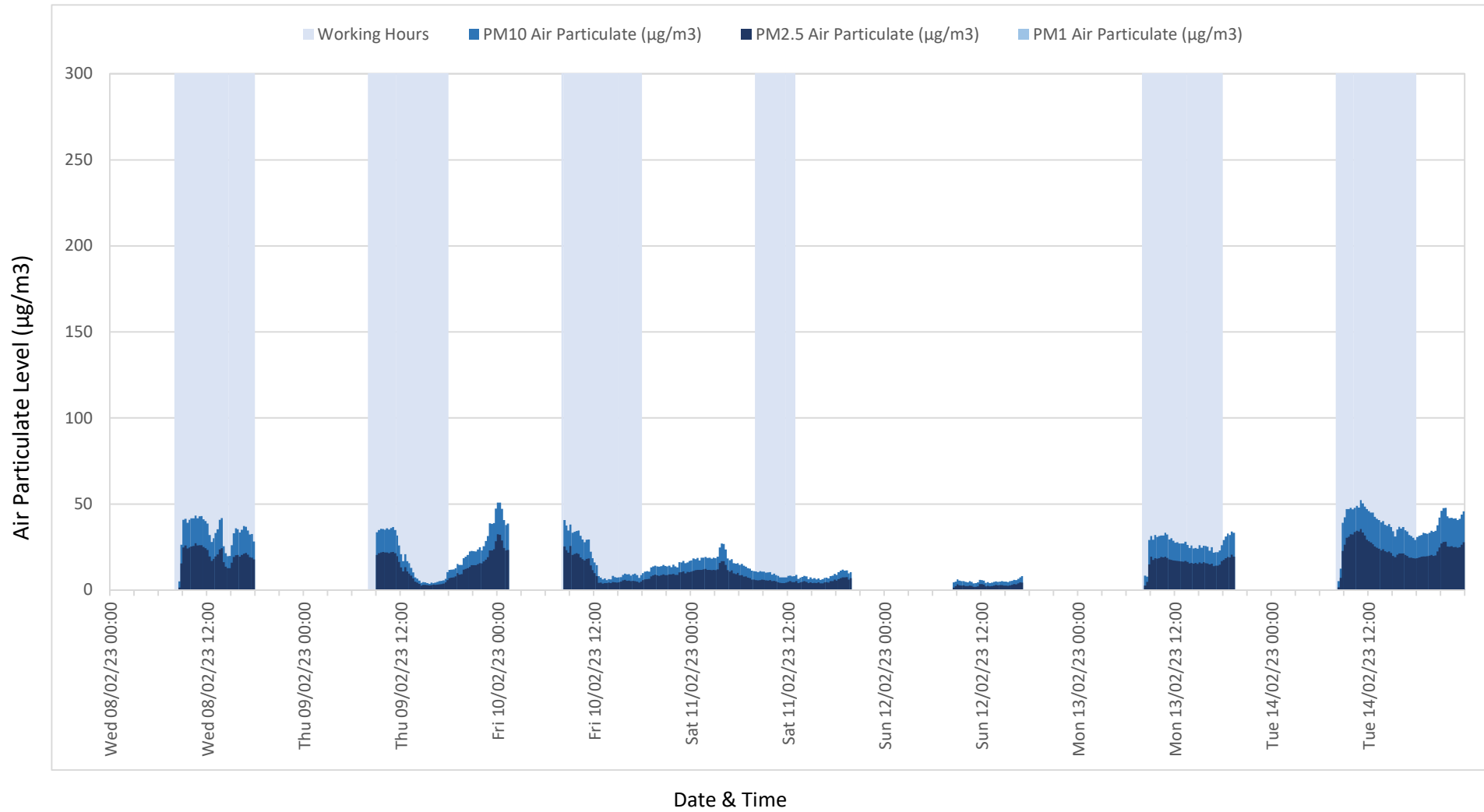
Wednesday 01/02/2023 to Tuesday 07/02/2023



52 Avenue Road

Position 4

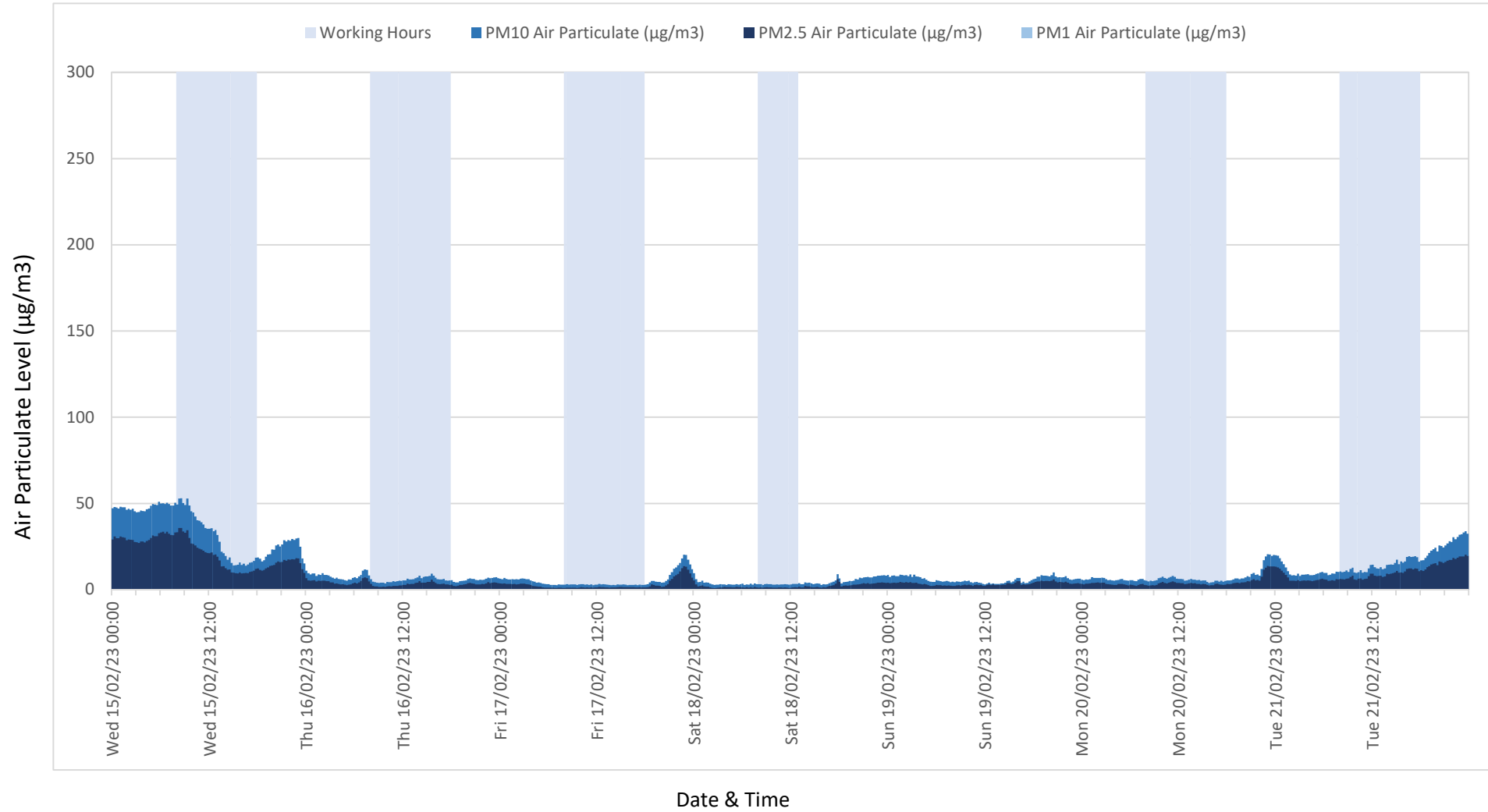
Wednesday 08/02/2023 to Tuesday 14/02/2023



52 Avenue Road

Position 4

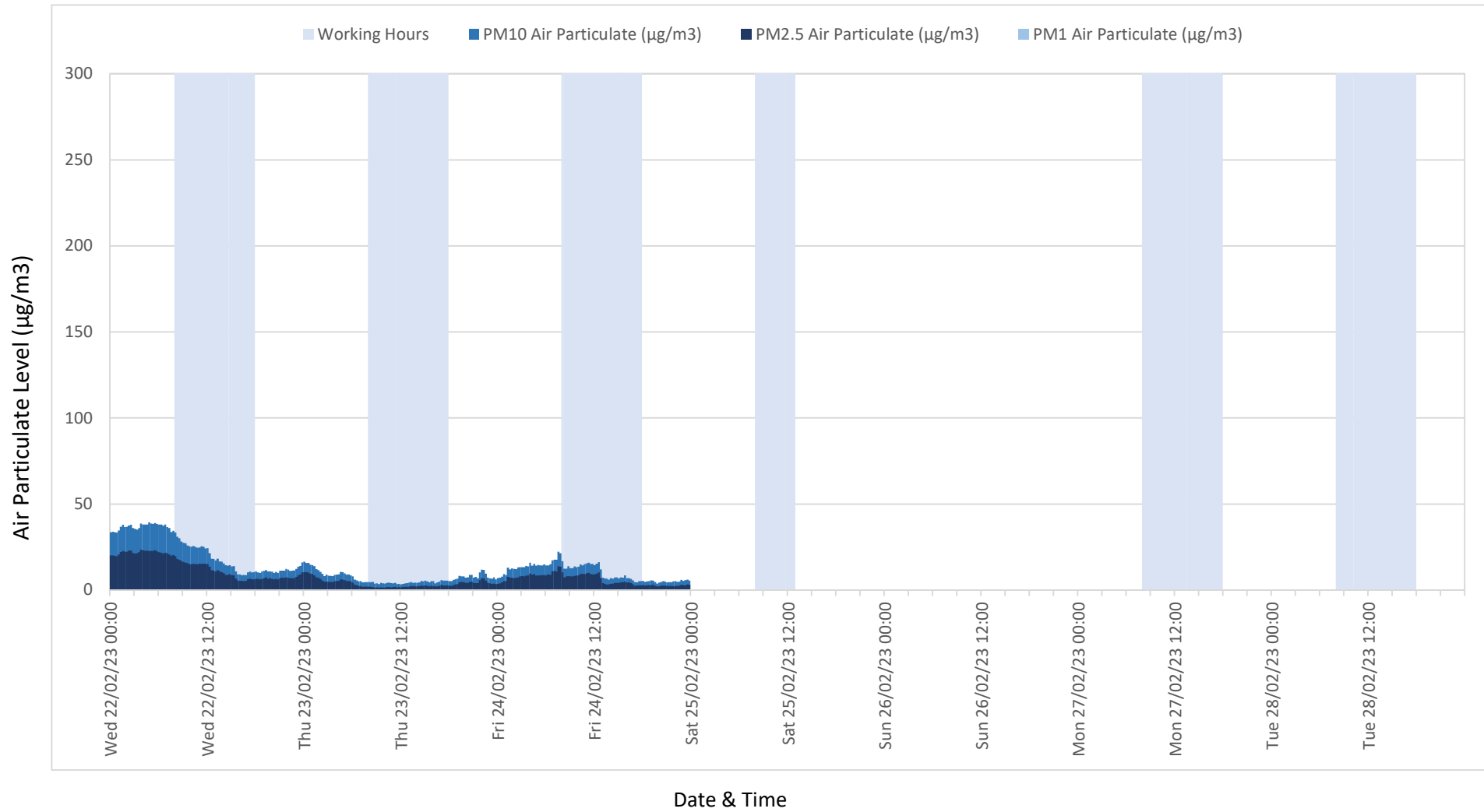
Wednesday 15/02/2023 to Tuesday 21/02/2023



52 Avenue Road

Position 4

Wednesday 22/02/2023 to Tuesday 28/02/2023



From: Max O'Brien <max.obrien@domvslondon.com>
Subject: Re: 52 Avenue Road - 2022/1863/P
Date: 19 January 2023 at 18:04:22 GMT
To: Mandip Sahota <ms@ntaplanning.co.uk>
Cc: Jon O'Brien <jon.obrien@domvslondon.com>, Gary Wait <gary.wait@domvslondon.com>

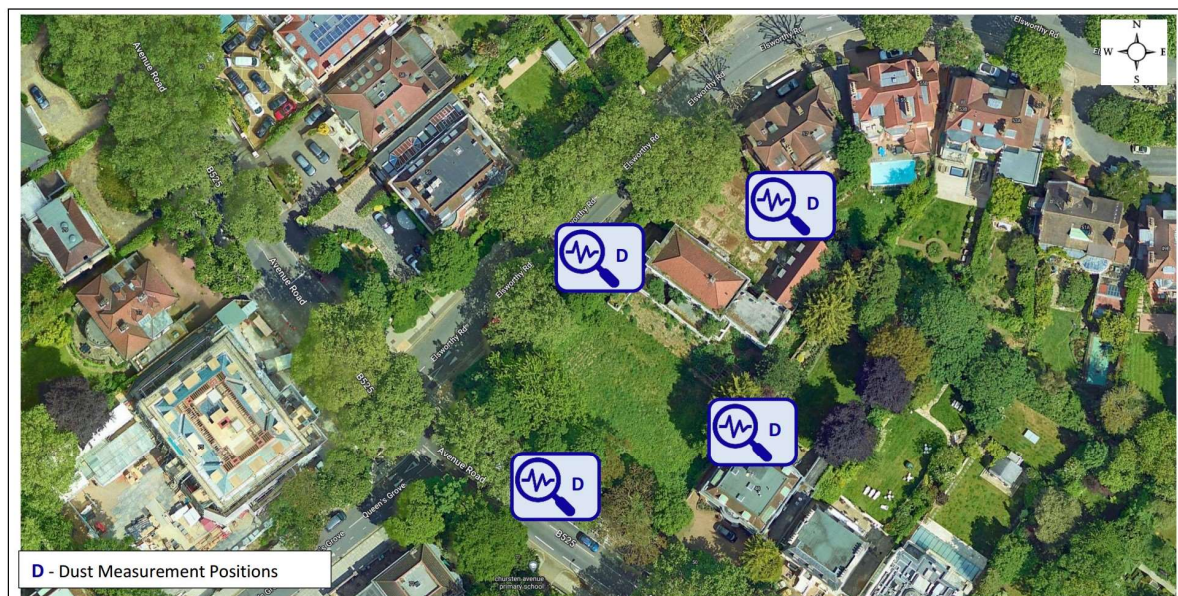
Hi Mandip,

We have tentatively agreed a 4 unit proposal from KP Monitoring who can arrange installation for Tuesday.

They have proposed locations as per the attached plan, covering Elsworthy Road, 57 Elsworthy Road, Avenue Road & 50 Avenue Road.

Can you push on Sofie to agree these locations as soon as possible and that they are happy with Monthly written reports for the monitors (PM10 and PM2.5 Mcerts air particle (dust)) so we can confirm with KP and commence our baseline readings from next week.

Thank you



Title	Project	Revision	Scale	
Proposed Environmental Monitoring Positions	KPM 26019: St Johns Wood, 52 Avenue Road, NW8	-	Not to Scale	The logo for KP monitoring, featuring the letters 'KP' in a bold, black font next to a green circular icon with a white spiral pattern, followed by the word 'monitoring' in a smaller, black font.

From: Mandip Sahota ms@ntaplanning.co.uk 
Subject: Fwd: 52 Avenue Road - 2022/1863/P
Date: 16 February 2023 at 10:39
To: Max O'Brien max.obrien@domvslondon.com
Cc: Jon O'Brien jon.obrien@domvslondon.com

MS

Morning Max,

Please see below.

Kind regards,

MANDIP SINGH SAHOTA
PARTNER

NTA PLANNING LLP

Begin forwarded message:

From: Sofie Fieldsend <Sofie.Fieldsend@camden.gov.uk>
Date: 16 February 2023 at 09:43:48 GMT
To: Mandip Sahota <ms@ntaplanning.co.uk>
Cc: Richard Limbrick <Richard.Limbrick@camden.gov.uk>
Subject: RE: 52 Avenue Road - 2022/1863/P

Mandip,

Due to the large volume of emails you are sending about this site, can you label what it regards in each email's subject title going forward ie. This one AQ monitor query or S106 query?

See response from AQ officer below:

Assuming that the four sensors have been positioned at each corner of the site area, these locations look to be okay.

Can you please request specifications of the AQ sensors that the applicants are planning on using (so we can ensure they are of MCERTs indicative quality)?

Can you also ask for more detail on how the sensors will be installed? - It is best practice to install the monitors 2-3m high, 1m away from the building's façade and with a 270 degree angle of exposure for the inlet head (I've attached a best practice example). Also attached is the Camden Council requirements for real-time AQ monitoring which contains all relevant information for the applicants, including the reporting requirements.

Regards,

--

Sofie Fieldsend
Senior Planner

Telephone: 02079744607



From: Mandip Sahota <ms@ntaplanning.co.uk>
Sent: 16 February 2023 07:56
To: Sofie Fieldsend <Sofie.Fieldsend@camden.gov.uk>
Cc: Richard Limbrick <Richard.Limbrick@camden.gov.uk>

From: Max O'Brien max.obrien@domvslondon.com 
Subject: Re: 52 Avenue Road - 2022/1863/P
Date: 17 February 2023 at 09:48
To: Mandip Sahota ms@ntaplanning.co.uk
Cc: Gary Wait gary.wait@domvslondon.com

MO

Morning Mandip,

Please see the attached from KP Acoustics. Hopefully this confirms all matters for Camden

Best,



EarthSense
Zephyr...22.pdf





On 16 Feb 2023, at 10:39, Mandip Sahota <ms@ntaplanning.co.uk> wrote:

Morning Max,

Please see below.

Kind regards,

MANDIP SINGH SAHOTA
PARTNER

NTA PLANNING LLP

Begin forwarded message:

From: Sofie Fieldsend <Sofie.Fieldsend@camden.gov.uk>
Date: 16 February 2023 at 09:43:48 GMT
To: Mandip Sahota <ms@ntaplanning.co.uk>
Cc: Richard Limbrick <Richard.Limbrick@camden.gov.uk>
Subject: RE: 52 Avenue Road - 2022/I863/P

Mandip,

Due to the large volume of emails you are sending about this site, can you label what it regards in each email's subject title going forward ie. This one AQ monitor query or S106 query?

See response from AQ officer below: