KP Monitoring Ltd.
info@kpacoustics.com
1 Galena Road, W6 0LT London, UK
+44 (0) 208 222 8778
www.kpacoustics.com

Part of the KP Acoustics Group

52 Avenue Road, London NW8 6HP

Air Quality Monitoring Report

Report 26019.2

Saturday 25 February 2023 to Friday 24 March 2023

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

KP monitoring
Part of the KP Acoustics Group

Report 26019.2 Revision History			
First Issue Date: 27/03/2023			
A		D	
B		E	
C		F	
Written by:		**Checked by:**	
Mohamed Salim Environmental Monitoring Project Engineer BEng(Hons), MIET		Richard P Booth Environmental Monitoring Manager MSc, BSc(Hons), MIOA, AMIEnvSc, AMIAQM	

KP monitoring
Part of the KP Acoustics Group

Contents

List of Attachments

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 4No. 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	79%
Position 2	0	0	100%
Position 3	0	0	100%
Position 4	0	0	100%

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 Saturday 25 February 2023 to Friday 24 March 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 Saturday 25 February 2023 to Friday 24 March 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, µg/m³, 15min)	Action Level (PM10, µg/m³, 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	79%
Position 2	N/A	N/A	100%
Position 3	N/A	N/A	100%
Position 4	N/A	N/A	100%

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 Saturday 25 February 2023 to Friday 24 March 2023.

The results are presented herein.

Unfortunately, we are unable to present data for Position 1 from Wednesday 08 March 2023 at approximately 1030 hours to Tuesday 14 March 2023 at approximately 1115 hours.

This instance of data loss was caused by a software error with regards to the manufacturers data portal. An engineer contacted the manufacturer and they were able to resolve the issue remotely.

APPENDIX A – AIR QUALITY TERMINOLOGY

PMx 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. PM2.5 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 PM2.5.

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 Saturday 25 February 2023 to Friday 24 March 2023.

Date	Position 1	Position 2	Position 3	Position 4
25/02/2023	5	8	5	4
26/02/2023	No Work	No Work	No Work	No Work
27/02/2023	4	7	4	4
28/02/2023	6	9	6	5
01/03/2023	4	7	4	4
02/03/2023	23	36	63	21
03/03/2023	6	10	6	6
04/03/2023	6	9	5	5
05/03/2023	No Work	No Work	No Work	No Work
06/03/2023	21	38	18	16
07/03/2023	11	18	10	9
08/03/2023	10	16	10	9
09/03/2023	-	27	16	16
10/03/2023	-	7	3	3
11/03/2023	-	21	12	12
12/03/2023	No Work	No Work	No Work	No Work
13/03/2023	-	12	6	5

Date	Position 1	Position 2	Position 3	Position 4
14/03/2023	4	8	4	4
15/03/2023	11	20	12	11
16/03/2023	5	8	4	4
17/03/2023	8	16	8	7
18/03/2023	7	10	6	6
19/03/2023	No Work	No Work	No Work	No Work
20/03/2023	7	13	7	7
21/03/2023	4	7	4	3
22/03/2023	4	7	4	3
23/03/2023	6	11	6	8
24/03/2023	4	7	3	3

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 Saturday 25 February 2023 to Friday 24 March 2023.

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

Date	Position 1	Position 2	Position 3	Position 4
14/03/2023	3	6	2	2
15/03/2023	4	8	4	5
16/03/2023	4	8	4	4
17/03/2023	5	9	5	5
18/03/2023	5	10	5	5
19/03/2023	No Work	No Work	No Work	No Work
20/03/2023	5	8	5	5
21/03/2023	4	7	4	3
22/03/2023	3	6	3	2
23/03/2023	4	7	4	3
24/03/2023	2	6	2	2

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 Saturday 25 February 2023 to Friday 24 March 2023.

Date	Position 1	Position 2	Position 3	Position 4
25/02/2023	7	9	9	8
26/02/2023	No Work	No Work	No Work	No Work
27/02/2023	6	8	7	7
28/02/2023	10	10	10	9
01/03/2023	5	8	6	6
02/03/2023	38	43	108	35
03/03/2023	9	11	10	9
04/03/2023	8	10	9	8
05/03/2023	No Work	No Work	No Work	No Work
06/03/2023	32	41	28	24
07/03/2023	16	19	15	14
08/03/2023	14	18	14	14
09/03/2023	-	29	26	23
10/03/2023	-	7	5	6
11/03/2023	-	23	18	18
12/03/2023	No Work	No Work	No Work	No Work
13/03/2023	-	13	16	13
14/03/2023	4	9	6	6

Date	Position 1	Position 2	Position 3	Position 4
15/03/2023	17	22	18	17
16/03/2023	7	9	7	6
17/03/2023	12	17	13	12
18/03/2023	10	11	11	10
19/03/2023	No Work	No Work	No Work	No Work
20/03/2023	11	15	12	12
21/03/2023	7	7	8	8
22/03/2023	7	8	8	7
23/03/2023	10	12	13	13
24/03/2023	7	8	8	8

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 Saturday 25 February 2023 to Friday 24 March 2023.

Date	Position 1	Position 2	Position 3	Position 4
25/02/2023	5	7	6	6
26/02/2023	No Work	No Work	No Work	No Work
27/02/2023	5	7	5	5
28/02/2023	6	7	7	7
01/03/2023	4	7	5	5
02/03/2023	21	26	24	20
03/03/2023	7	10	8	8
04/03/2023	5	7	6	5
05/03/2023	No Work	No Work	No Work	No Work
06/03/2023	18	22	17	17
07/03/2023	10	13	11	11
08/03/2023	25	20	19	18
09/03/2023	-	21	18	17
10/03/2023	-	6	5	5
11/03/2023	-	14	12	11
12/03/2023	No Work	No Work	No Work	No Work
13/03/2023	-	10	11	10
14/03/2023	4	7	4	4

Date	Position 1	Position 2	Position 3	Position 4
15/03/2023	7	9	7	8
16/03/2023	7	8	7	7
17/03/2023	7	9	8	8
18/03/2023	10	13	11	10
19/03/2023	No Work	No Work	No Work	No Work
20/03/2023	7	8	8	7
21/03/2023	7	9	8	7
22/03/2023	5	6	6	5
23/03/2023	7	9	9	8
24/03/2023	5	6	6	5

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

APPENDIX C – PM10 Air Particulate Level Statistics for Saturday 25 February 2023 to Friday 24 March 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 ($\mu g/m^3$)	Minimum PM10 Dust Level ($\mu g/m^3$)	Maximum PM0 Dust Level ($\mu g/m^3$)	Data Capture Rate
Position 1	8	2	38	79%
Position 2	11	5	43	100%
Position 3	9	2	108	100%
Position 4	9	3	35	100%

Table 13 Working Day PM10 dust level statistics

Position	Mean Average PM10 Dust Level ($\mu g/m^3$)	Minimum PM10 Dust Level ($\mu g/m^3$)	Maximum PM0 Dust Level ($\mu g/m^3$)
Position 1	9	3	41
Position 2	12	5	44
Position 3	10	3	38
Position 4	10	3	37

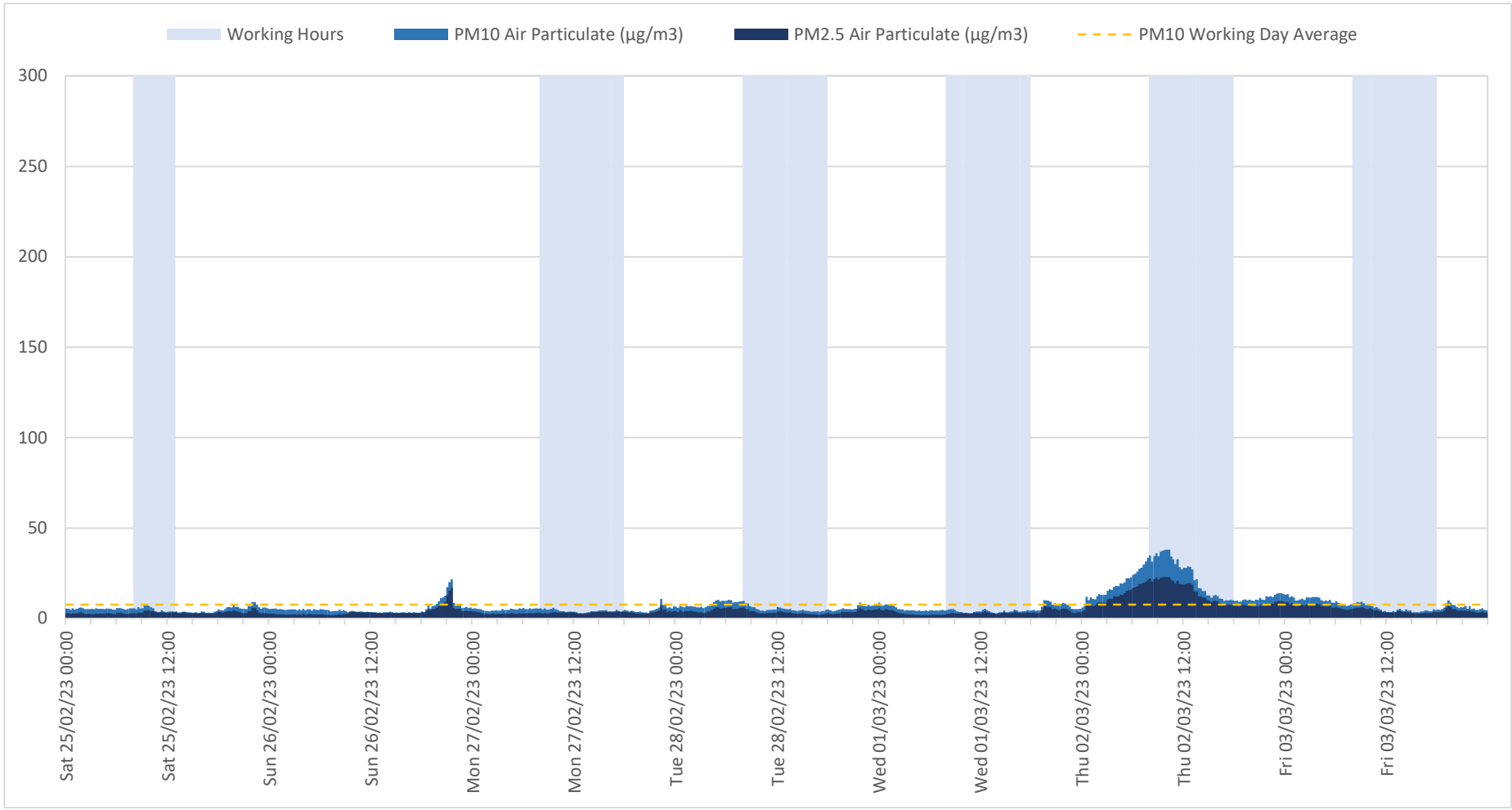
APPENDIX D – Environmental Monitoring Site Plan

Environmental Monitoring Positions	52 Avenue Road	Revision: -	Not to Scale	KP monitoring Part of the KP Acoustics Group

52 Avenue Road

Position 1

Saturday 25/02/2023 to Friday 03/03/2023

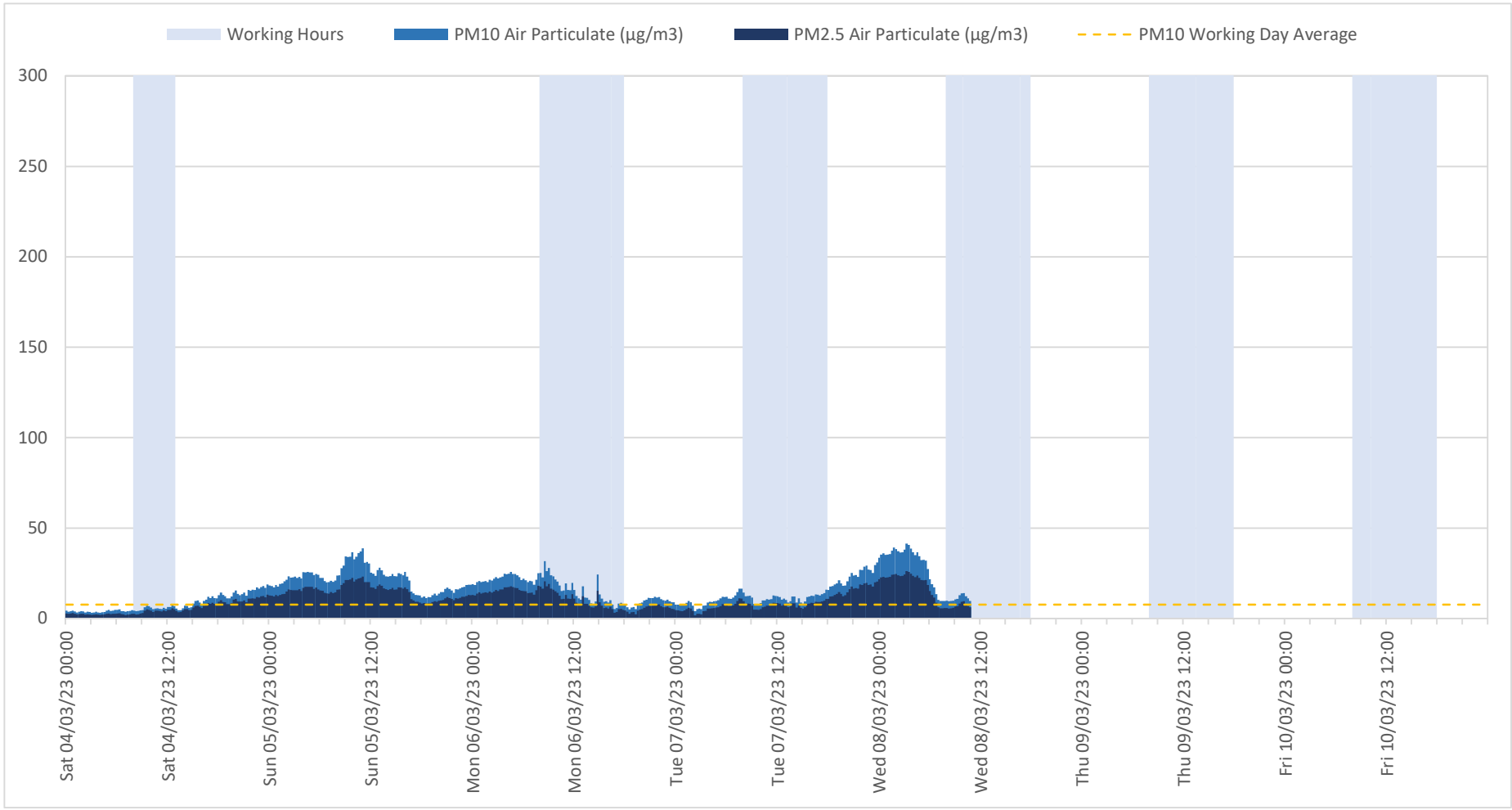


KPM-AP:26019-2.1-1

52 Avenue Road

Position 1

Saturday 04/03/2023 to Friday 10/03/2023

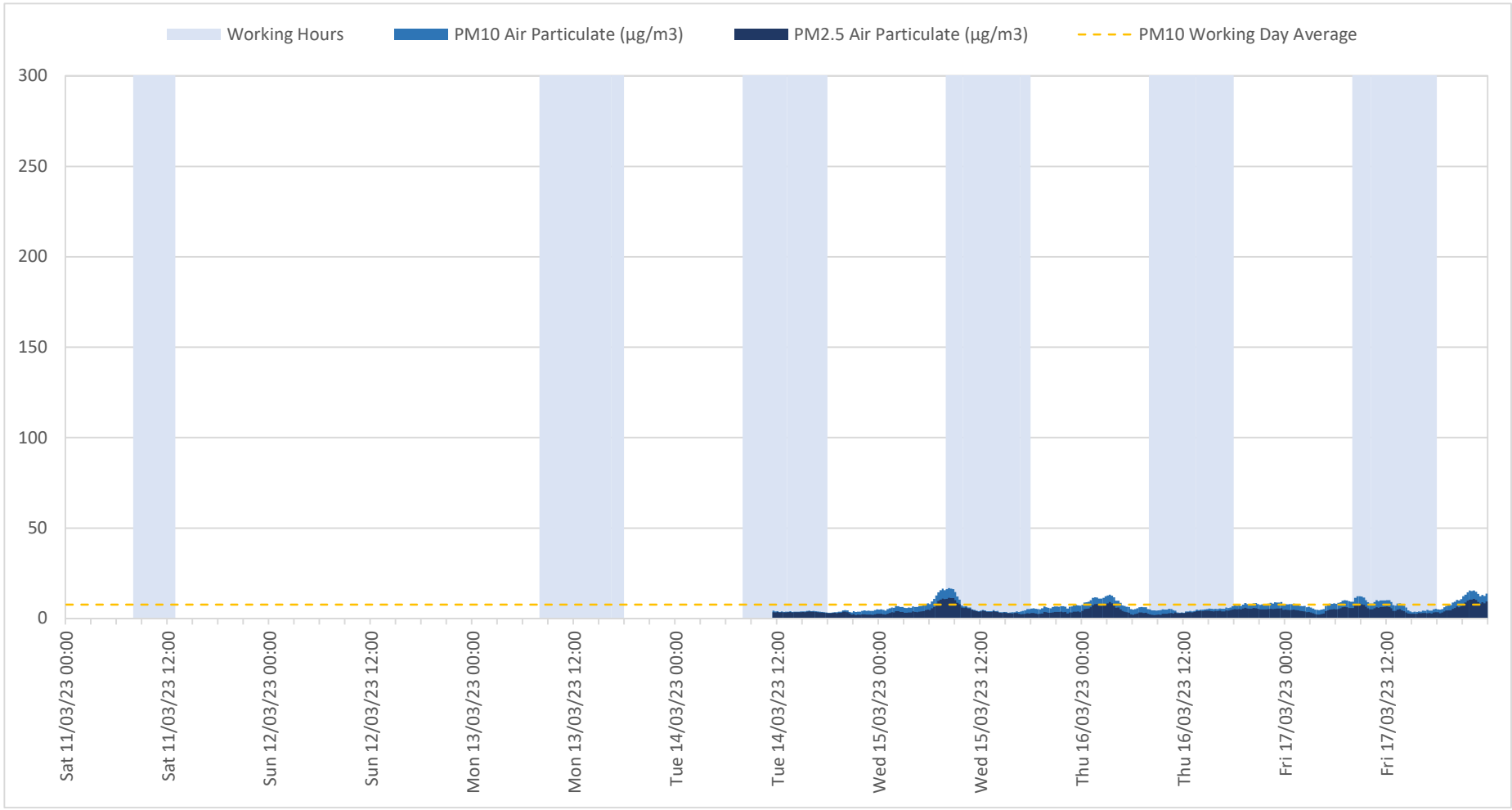


KPM-AP:26019-2.1-2

52 Avenue Road

Position 1

Saturday 11/03/2023 to Friday 17/03/2023

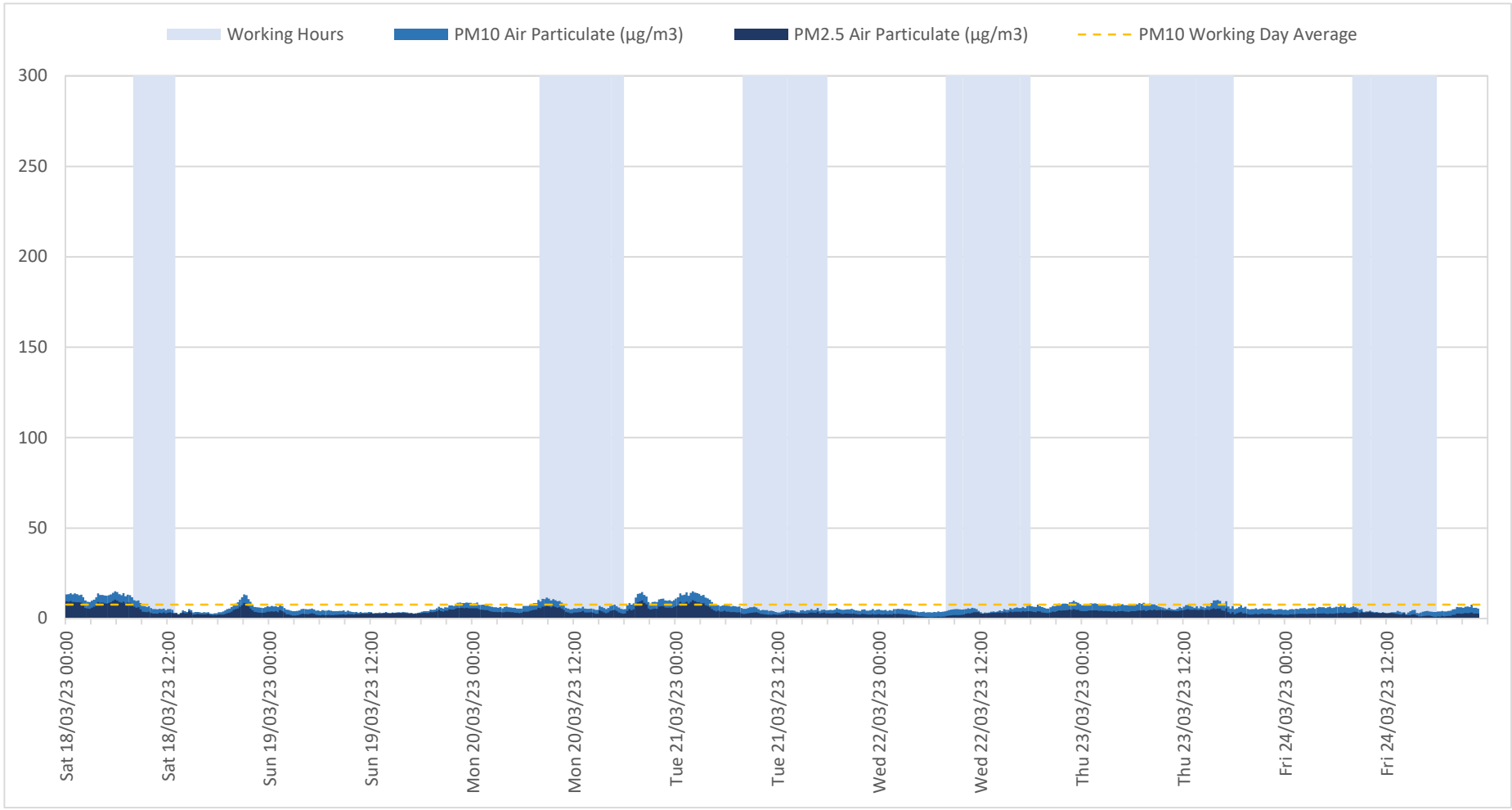


KPM-AP:26019-2.1-3

52 Avenue Road

Position 1

Saturday 18/03/2023 to Friday 24/03/2023

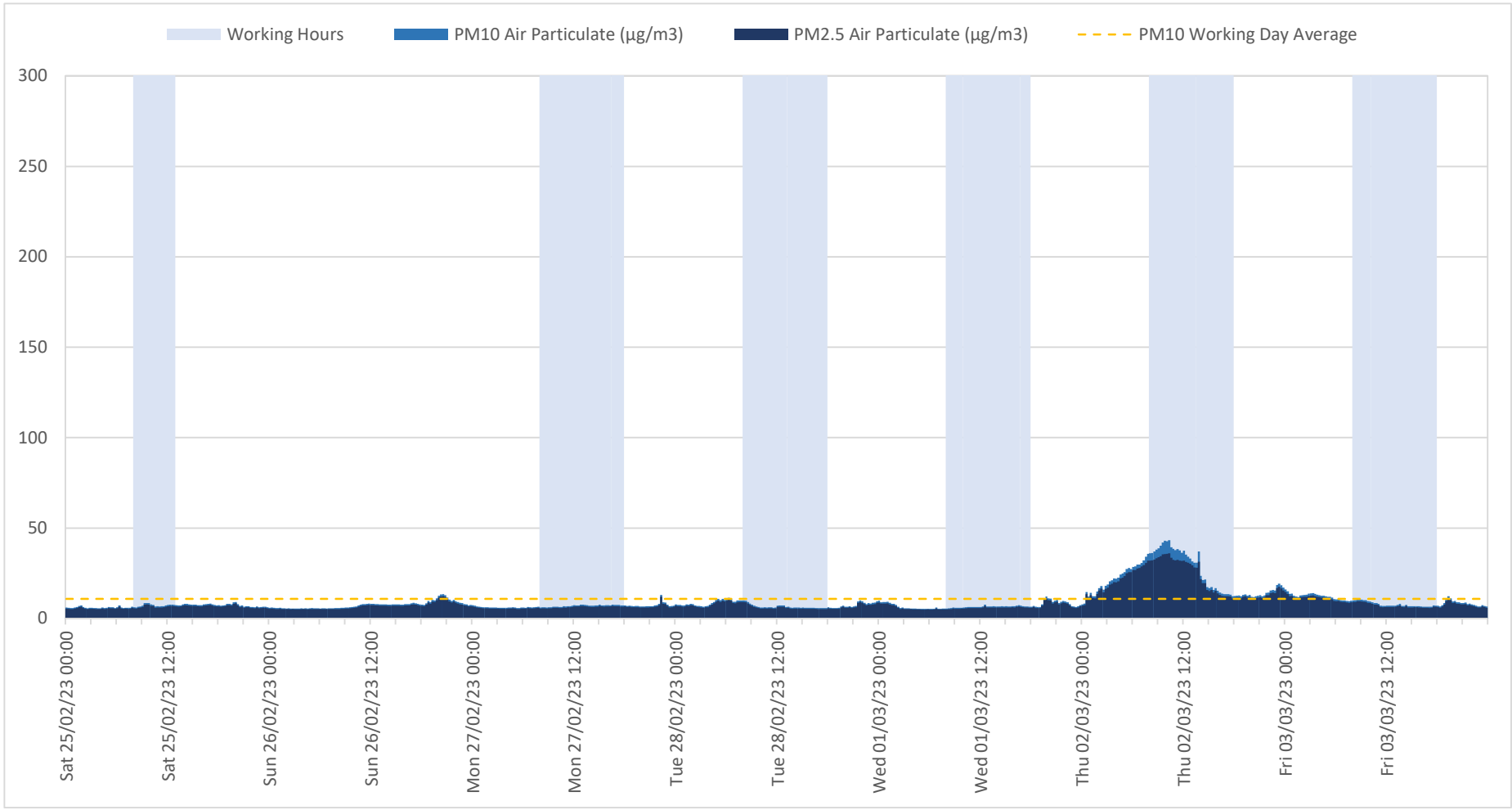


KPM-AP:26019-2.1-4

52 Avenue Road

Position 2

Saturday 25/02/2023 to Friday 03/03/2023

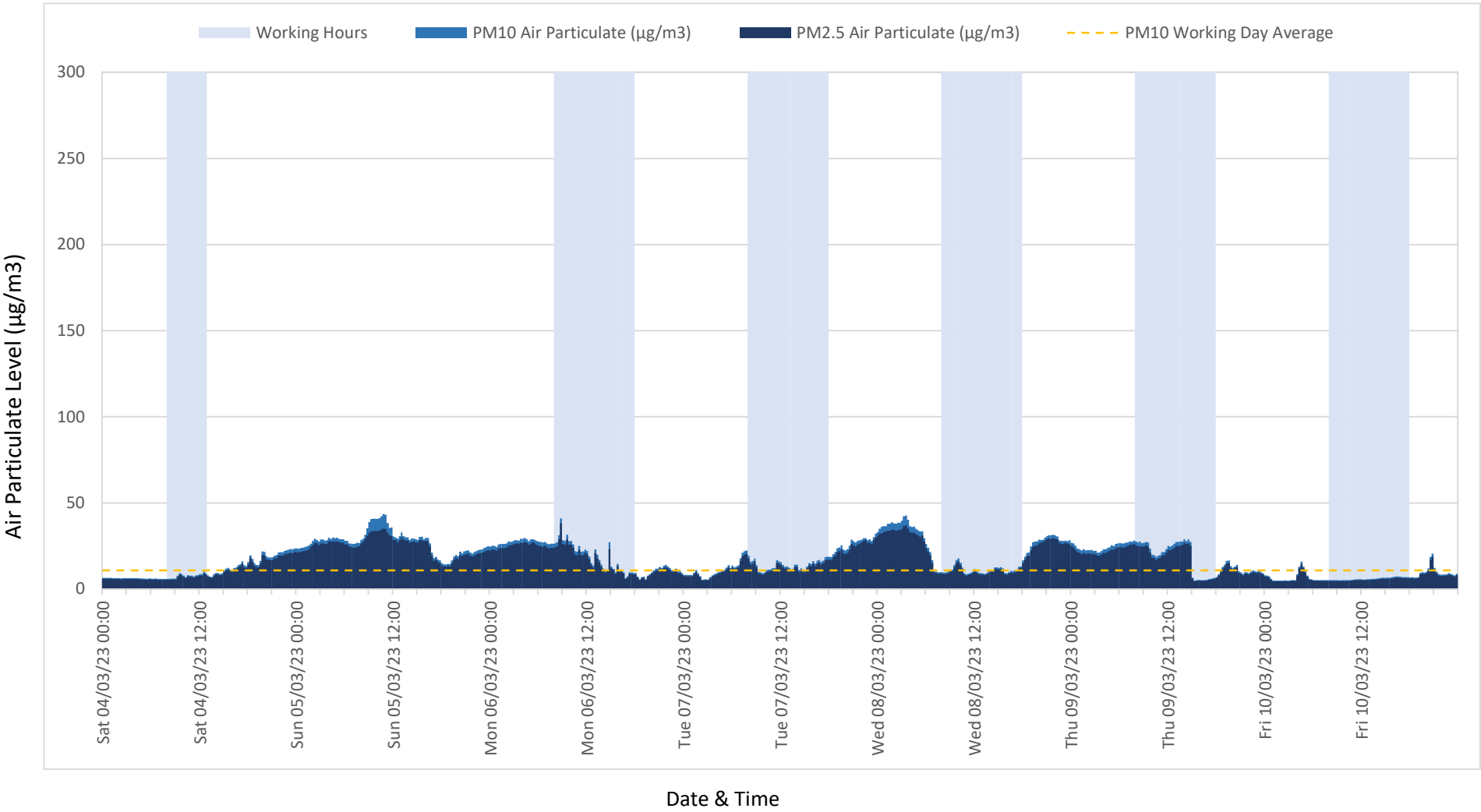


KPM-AP:26019-2.2-1

52 Avenue Road

Position 2

Saturday 04/03/2023 to Friday 10/03/2023

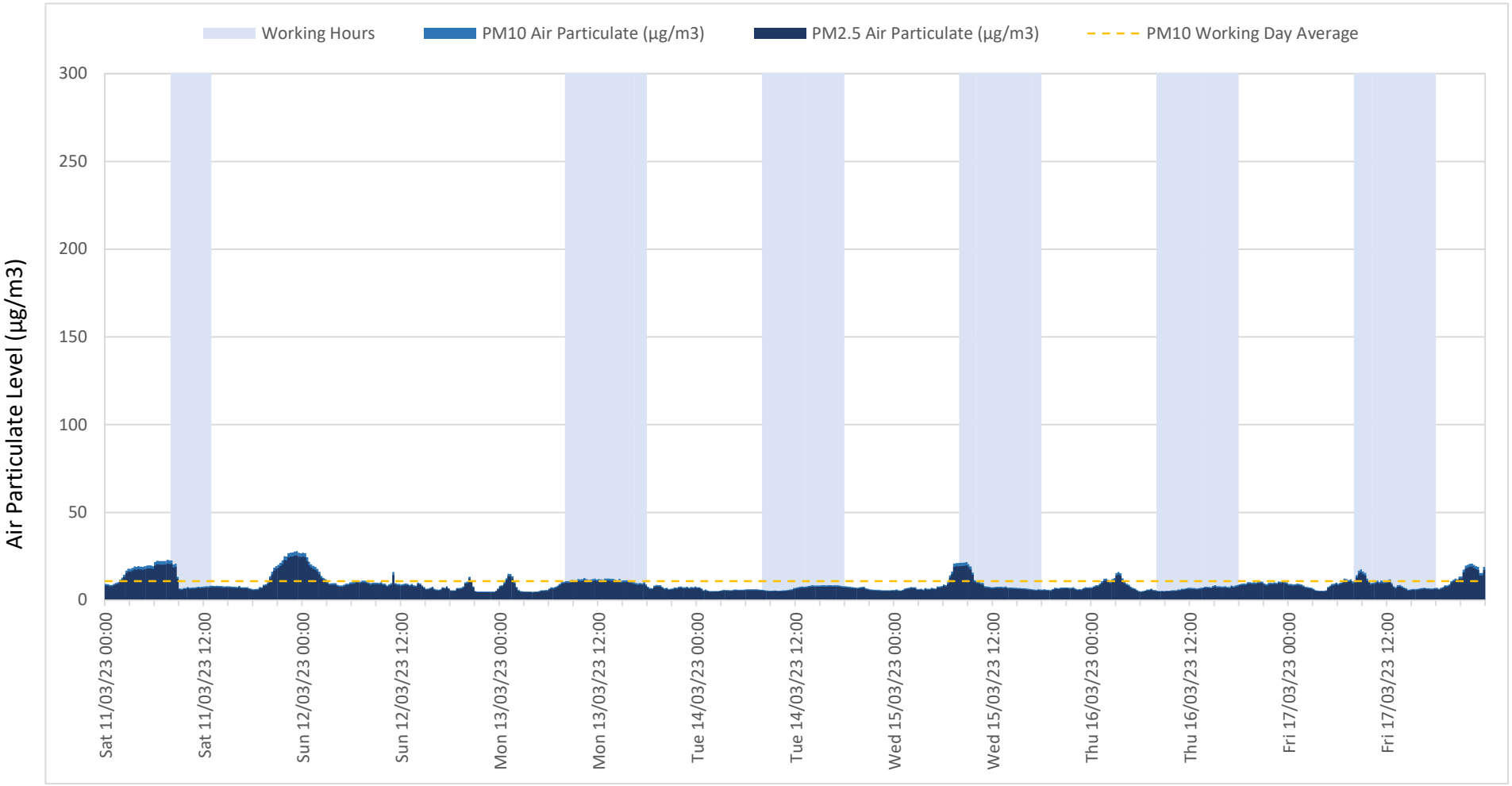


KPM-AP:26019-2.2-2

52 Avenue Road

Position 2

Saturday 11/03/2023 to Friday 17/03/2023

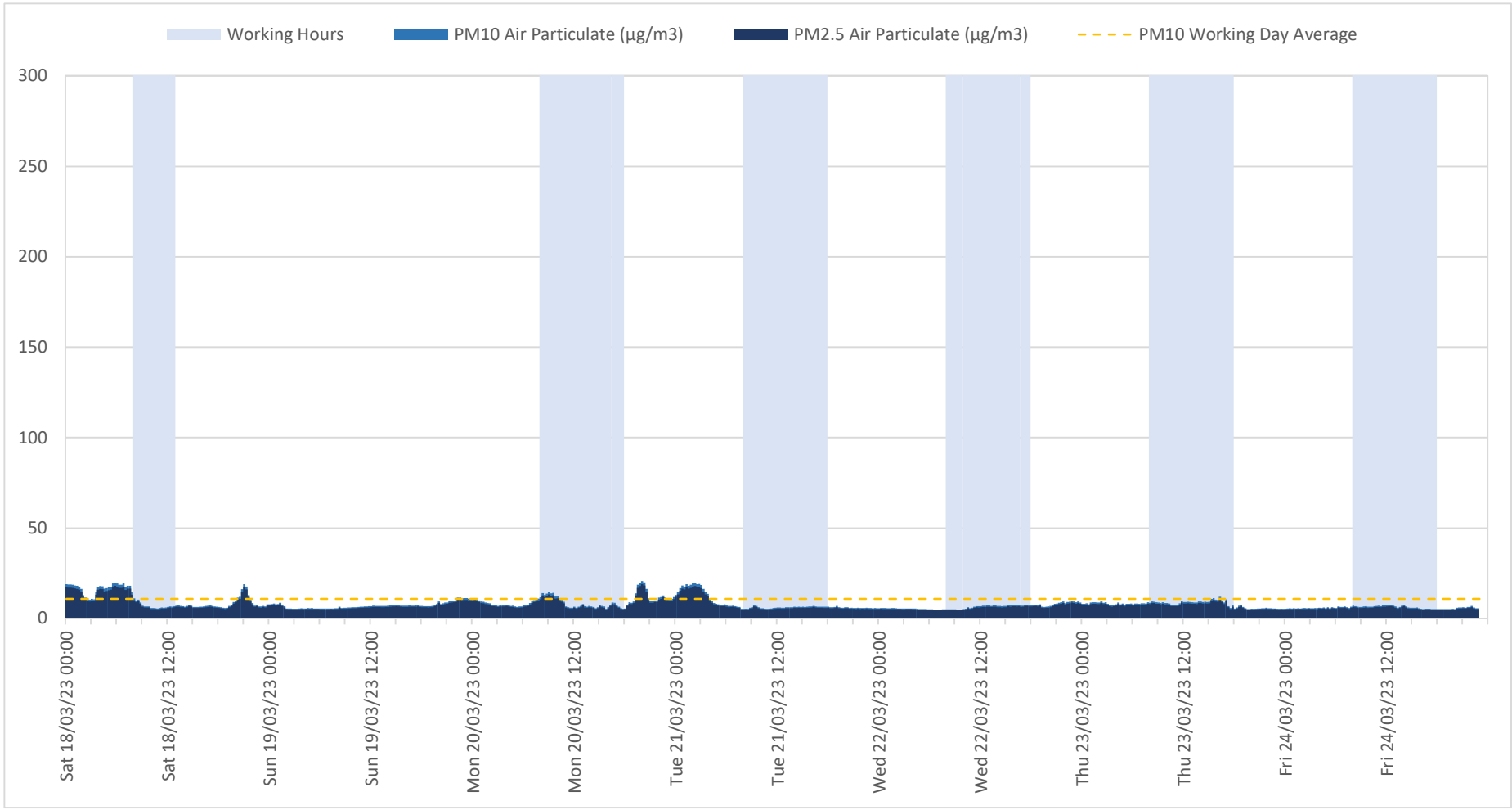


KPM-AP:26019-2.2-3

52 Avenue Road

Position 2

Saturday 18/03/2023 to Friday 24/03/2023

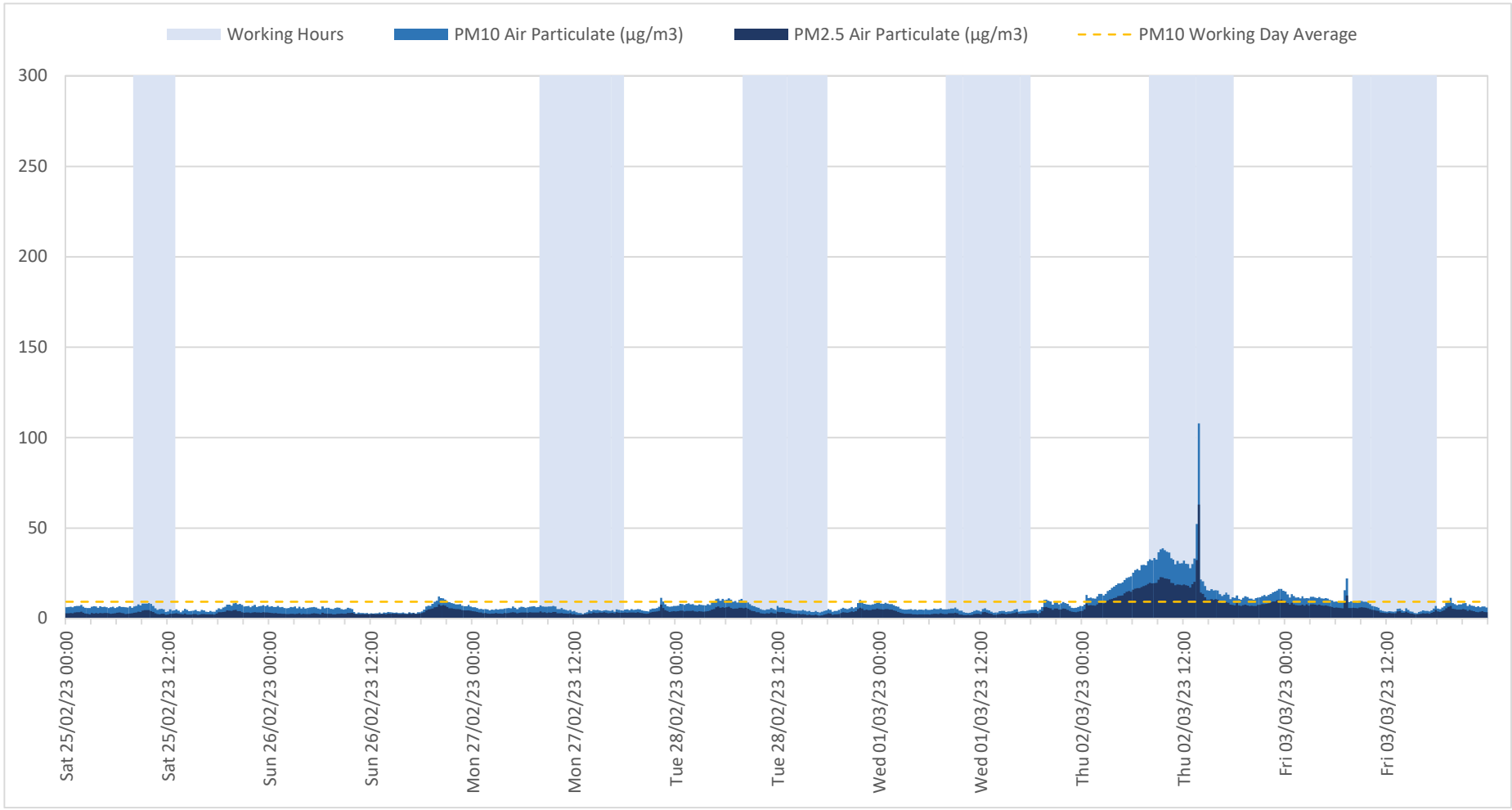


KPM-AP:26019-2.2-4

52 Avenue Road

Position 3

Saturday 25/02/2023 to Friday 03/03/2023

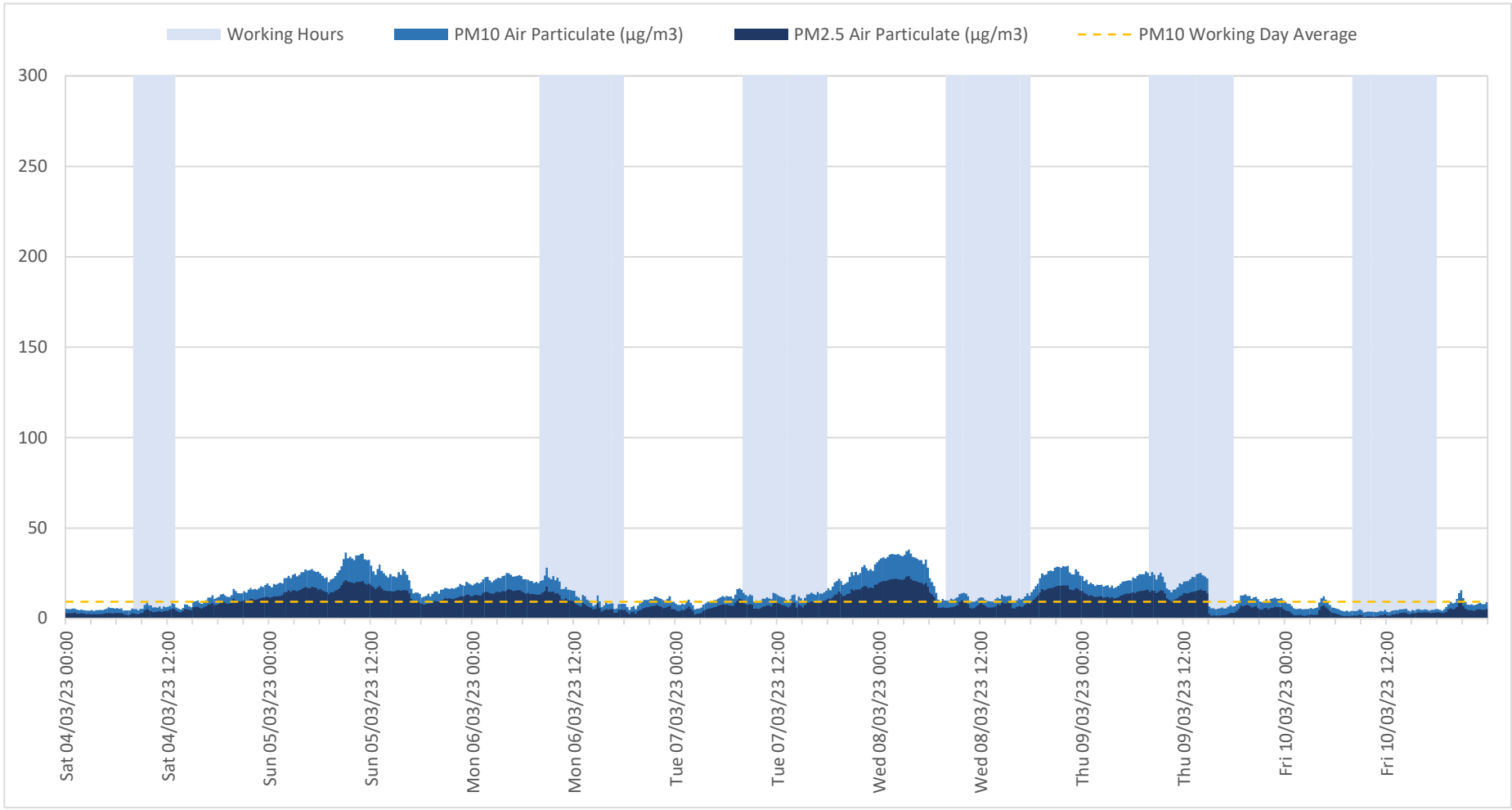


KPM-AP:26019-2.3-1

52 Avenue Road

Position 3

Saturday 04/03/2023 to Friday 10/03/2023

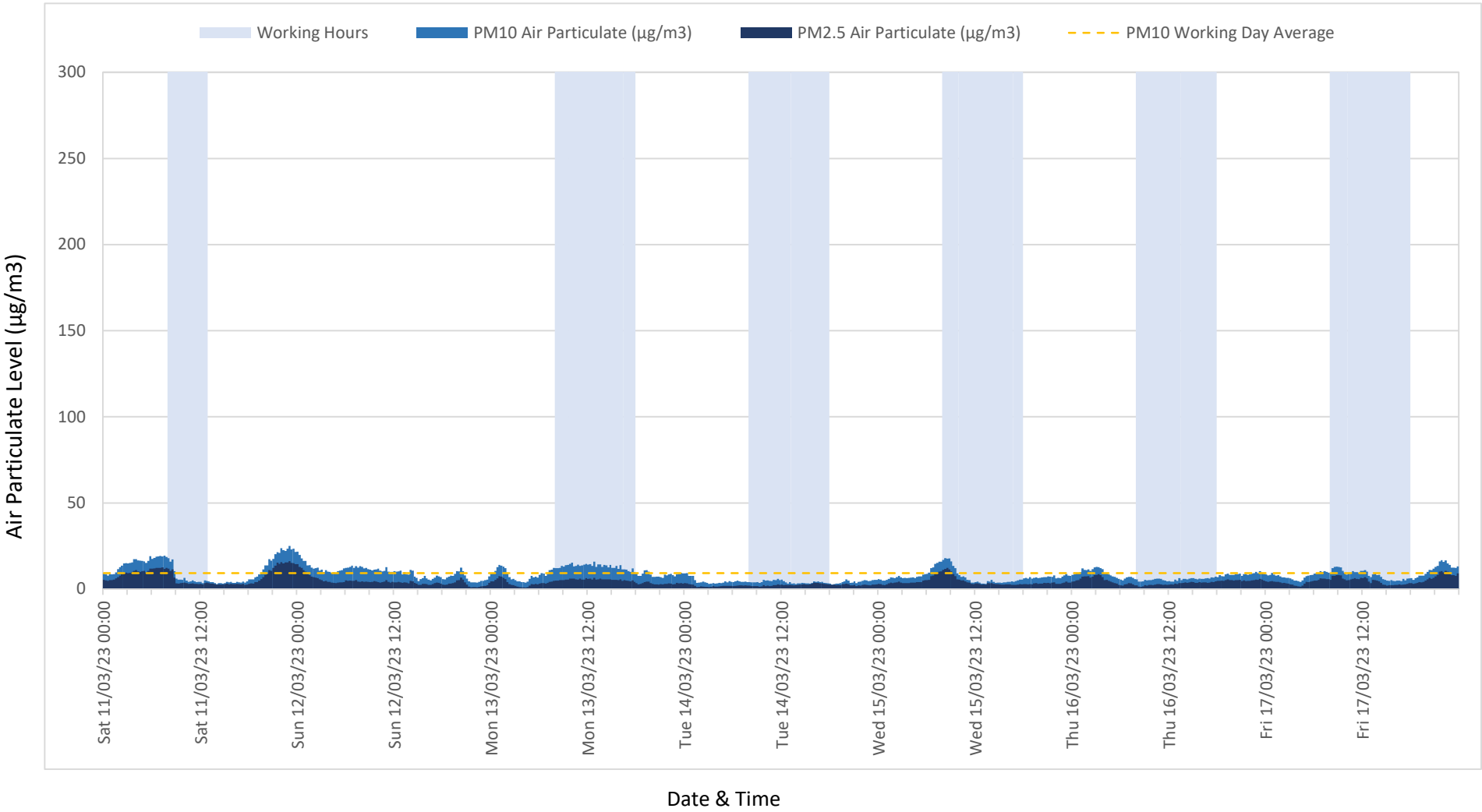


KPM-AP:26019-2.3-2

52 Avenue Road

Position 3

Saturday 11/03/2023 to Friday 17/03/2023

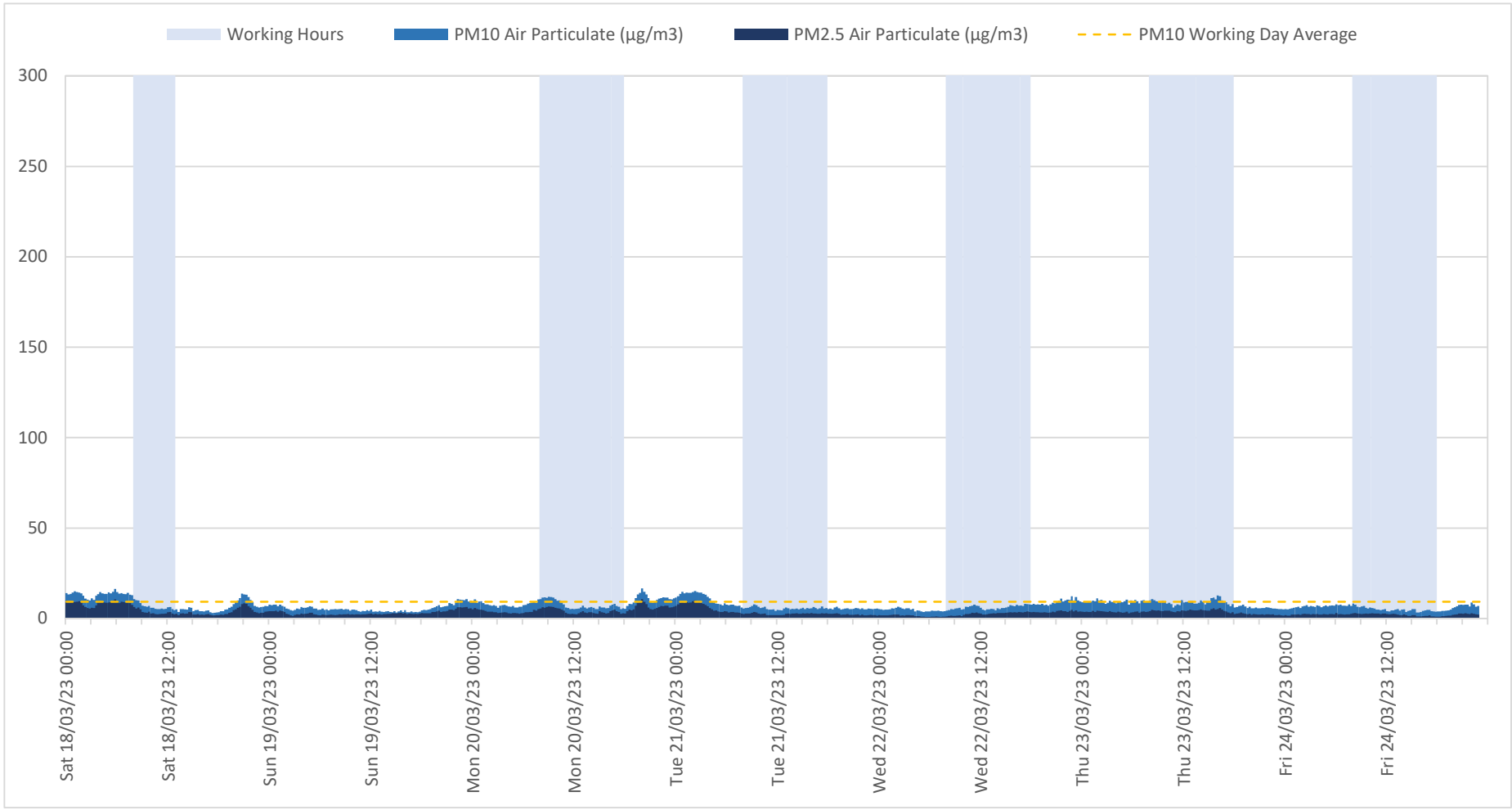


KPM-AP:26019-2.3-3

52 Avenue Road

Position 3

Saturday 18/03/2023 to Friday 24/03/2023

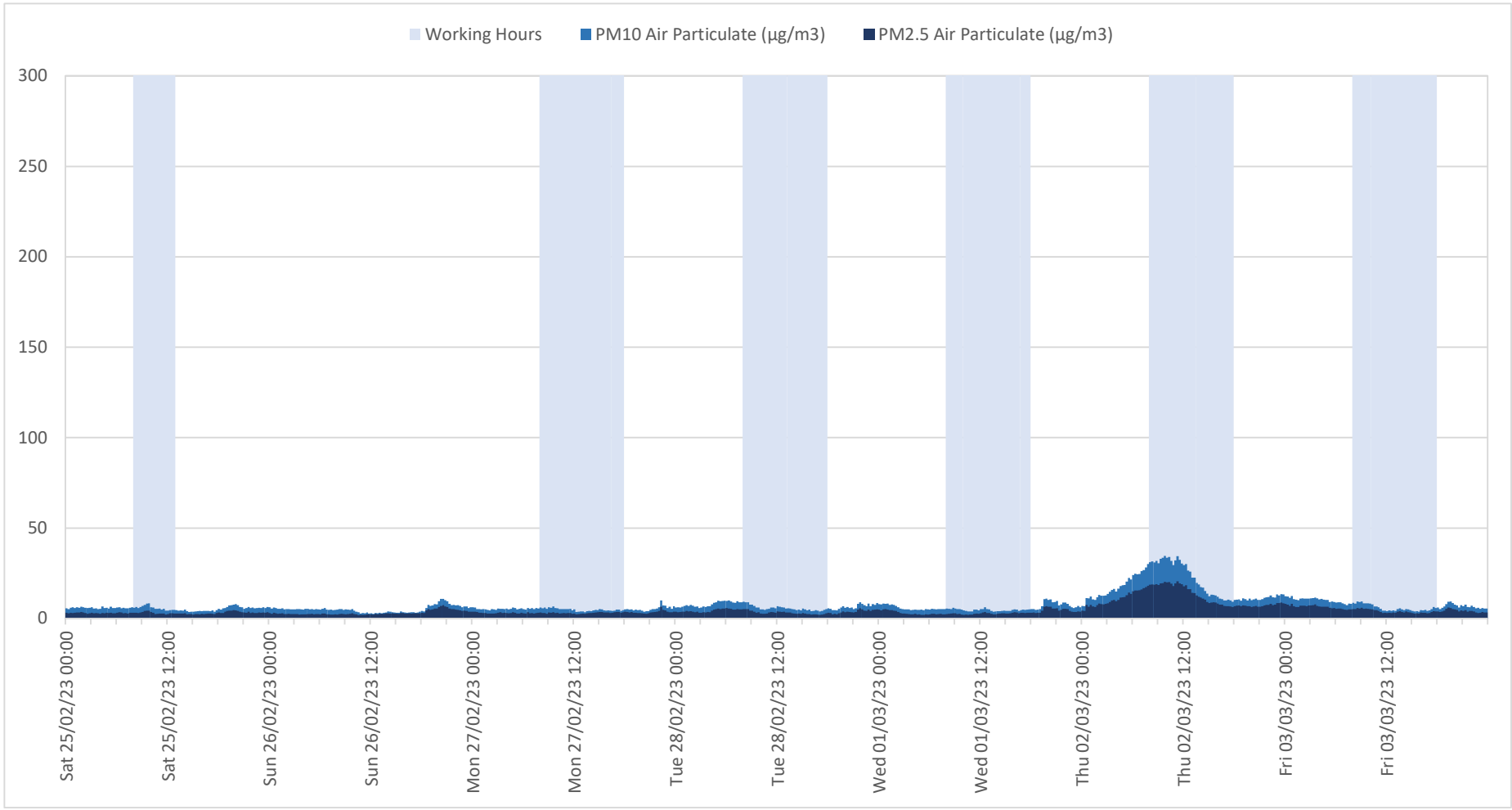


KPM-AP:26019-2.3-4

52 Avenue Road

Position 4

Saturday 25/02/2023 to Friday 03/03/2023

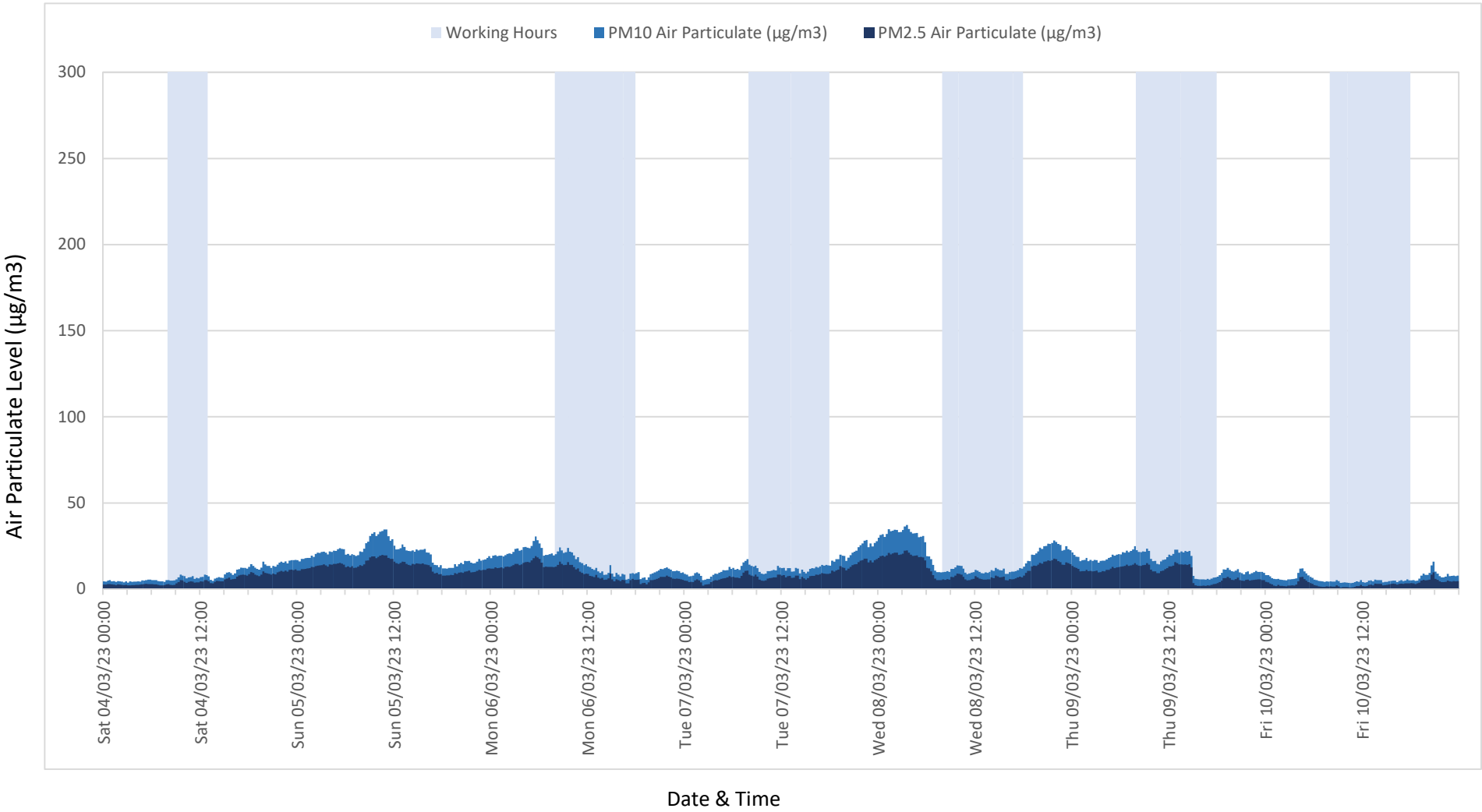


KPM-AP:26019-2.4-1

52 Avenue Road

Position 4

Saturday 04/03/2023 to Friday 10/03/2023

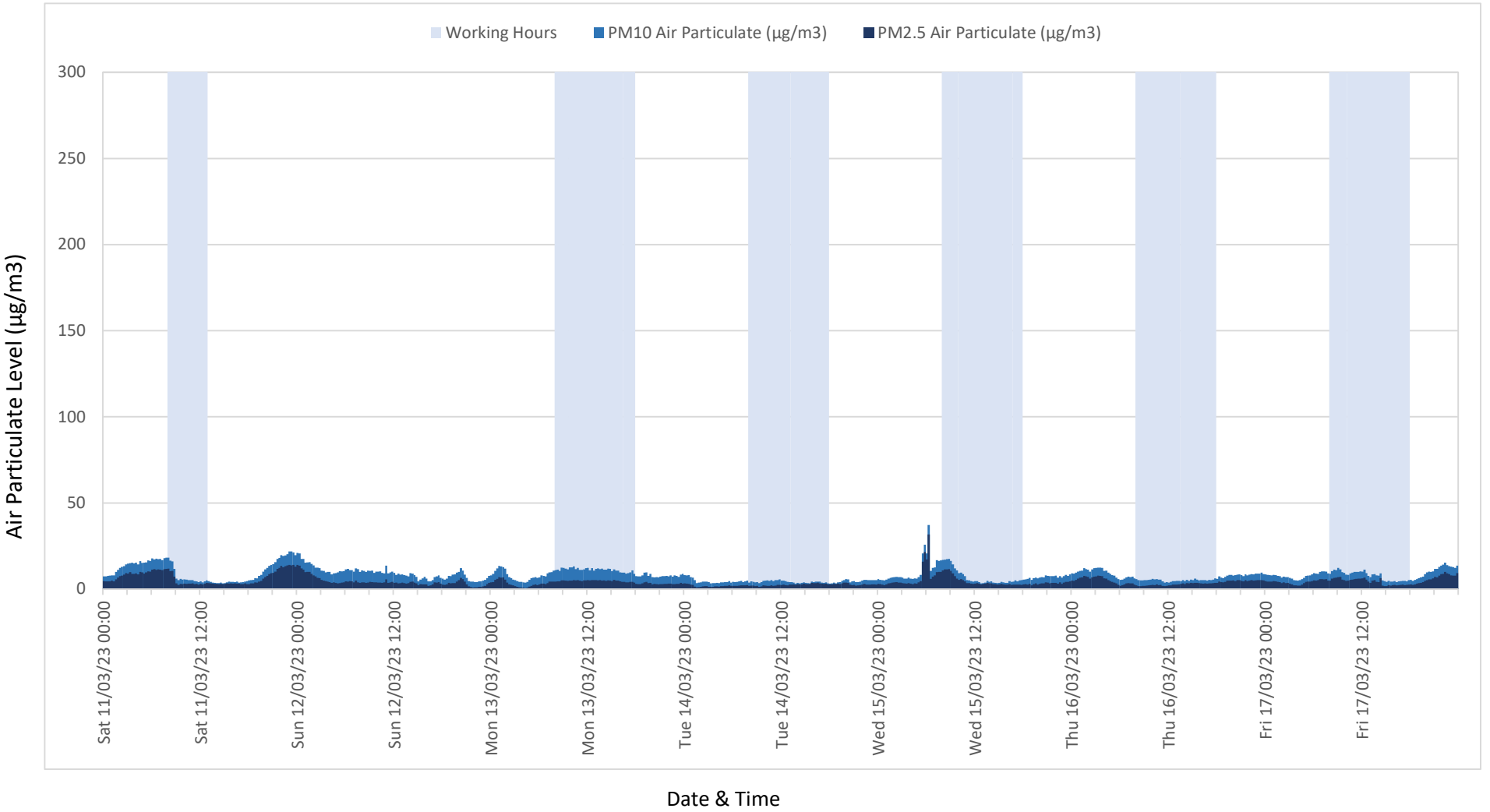


KPM-AP:26019-2.4-2

52 Avenue Road

Position 4

Saturday 11/03/2023 to Friday 17/03/2023

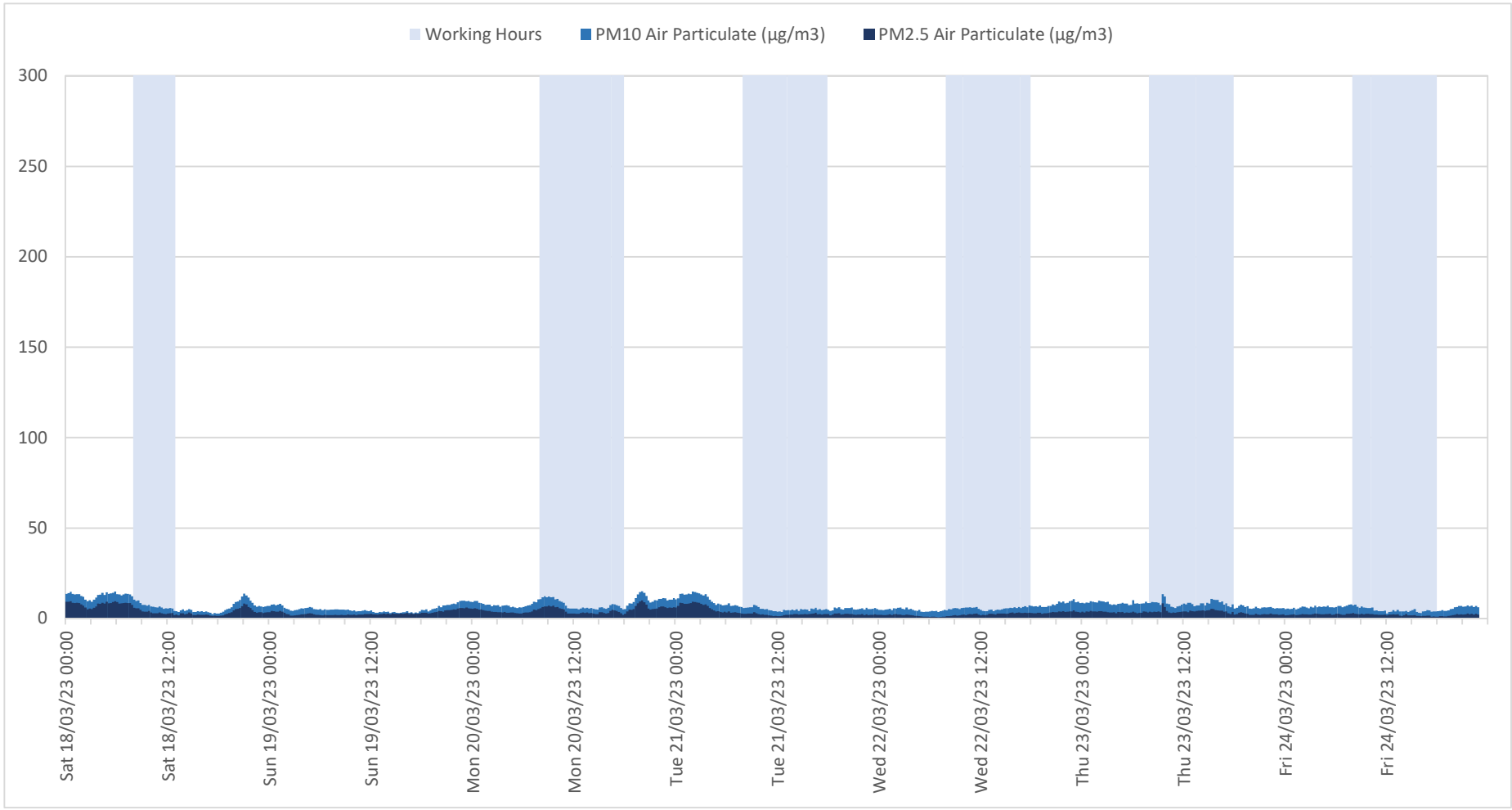


KPM-AP:26019-2.4-3

52 Avenue Road

Position 4

Saturday 18/03/2023 to Friday 24/03/2023



KPM-AP:26019-2.4-4

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,

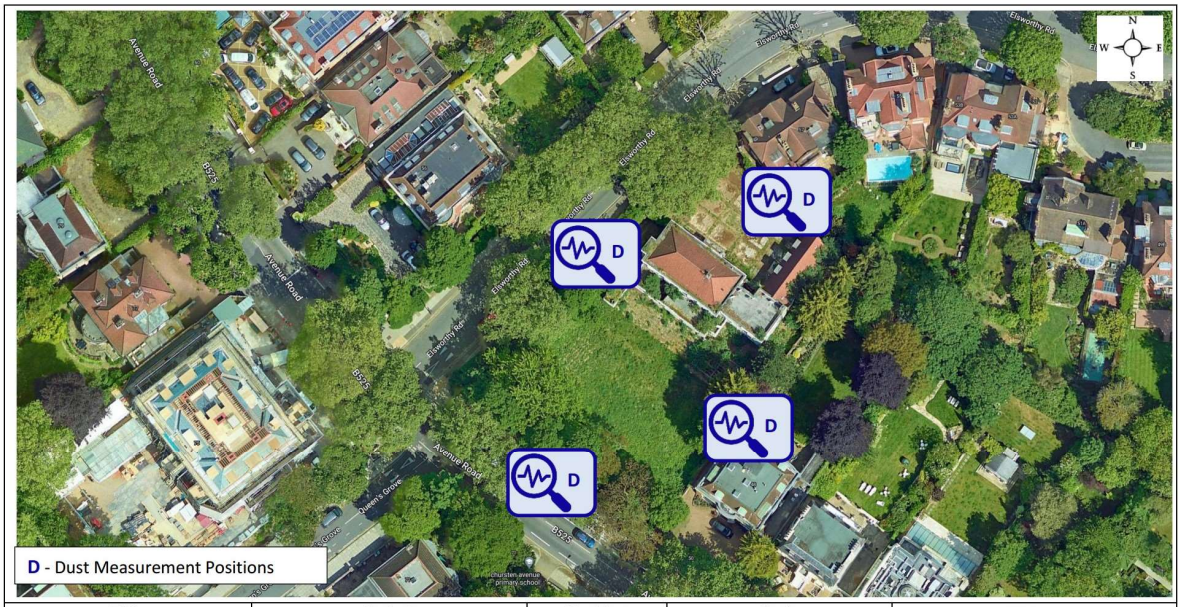
We have tentatively agreed a 4 unit proposal from KP Monitoring who can arrange installation for Tuesday.

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

KP monitoring — Environmental Monitoring Services Proposal – Proposed Site Layout — 19 January 2023



Title	Project	Revision	Scale	
Proposed Environmental Monitoring Positions	KPM 26019: St Johns Wood, 52 Avenue Road, NW8	-	Not to Scale	KP monitoring

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,

PDF

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 - 2022/1863/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: