



31 Southampton Row, London, WC1A 2RA

Air Quality Assessment

April 2024

Waterman Infrastructure & Environment Limited

Pickfords Wharf, Clink Street, London, SE1 9DG
www.watermangroup.com

Client Name: Hogarth Properties Sarl
Document Reference: 20620100-WAT-XX-XX-RP-N-720001_P01.01_S1
Project Number: WIE20620

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Date	Prepared by	Checked by	Approved by
First	April 2024	Stephanie Jones Graduate Consultant	Andrew Fowler Associate Director	Andrew Fowler Associate Director



Comments

Comments

Disclaimer

This report has been prepared by Waterman Infrastructure & Environment Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

Contents

1. Introduction	1
Overview	1
Context	1
Report Structure	2
2. Legislation, Planning Policy & Guidance	3
General	3
Legislation	3
Planning Policy	3
Guidance	3
3. Baseline Conditions	5
London Borough of Camden’s Review and Assessment Process	5
London Borough of Camden’s Local Monitoring	5
Defra Background Maps	7
4. Construction Phase	9
Assessment Methodology	9
Determining Significance of Impacts	11
Construction Phase Effects	12
Construction Vehicle Exhaust Emissions	14
Construction Mitigation Measures and Residual Effects	14
Dust Emissions	14
Construction Vehicle Emissions	14
5. Operational Development	15
Effect of the Proposed Development on Local Air Quality	15
Predicted Future Exposure (Office and Retail Users)	15
Mitigation Measures	16
6. Summary And Conclusions	17

Tables

Table 1: Measured Concentrations at automatic monitors within 2km of the Site	6
Table 2: Measured Concentrations at LBC diffusion tubes within 0.5km of the Site	7
Table 3: Defra Background Map Concentrations for the Grid Square of the Site	8
Table 4: Summary of the IAQM Construction guidance for Undertaking a Construction Dust Assessment	10
Table 5: Risk of Dust Impacts - Demolition	11

Contents

31 Southampton Row, London, WC1A 2RA

Project Number: WIE20620

Document Reference: 20620100-WAT-XX-XX-RP-N-720001_P01.01_S1

Table 6: Risk of Dust Impacts - Earthworks	12
Table 7: Risk of Dust Impacts - Construction	12
Table 8: Risk of Dust Impacts - Trackout	12
Table 9: Summary of Dust Risk	14

Appendices

- A. Summary of Relevant Legislation, Planning Policy and Guidance
- B. Assessor Experience

Contents

Executive Summary

This Air Quality Assessment has been prepared by Waterman Infrastructure and Environment Ltd on behalf of Hogarth Properties Sarl, to accompany the planning application for the redevelopment of 31 Southampton Row, London, WC1A 2RA within the London Borough of Camden.

The main likely effects on local air quality during construction relates to dust emissions. A range of mitigation measures to minimise or prevent dust emissions would be implemented through the construction works. This would ensure effects would be not significant at all local sensitive receptor locations.

With the implementation of a range of appropriate management practices, the effects associated with construction vehicles would be not significant.

In accordance with the London Plan all construction plant would need to adhere to the emissions standards for NO₂ and PM₁₀ set out for Non-Road Mobile Machinery. As such, it is considered the effects associated with construction plant would be not significant.

The Development would not result in a change in Annual Average Daily Traffic of more than 100 light duty vehicle flows or 25 heavy duty vehicle flows. The change in vehicle flows would therefore be below the Environmental Protection UK and Institute of Air Quality Management (EPUK/IAQM) guidance criteria. In addition, the Development would not include a generator or any other centralised combustion plant, and therefore would not give rise to any significant adverse air quality impacts.

Based on the low trip generation and absence of a centralised combustion plant, according to the EPUK/IAQM guidance, the Development is not expected to give rise to air quality impacts. As such the likely effect of the operational Development on local air quality would not be significant.

A review of local monitoring data, and Defra background maps, conclude concentrations for future residential users of the Development would be not significant.

Executive Summary

31 Southampton Row, London, WC1A 2RA

Project Number: WIE20620

Document Reference: 20620100-WAT-XX-XX-RP-N-720001_P01.01_S1

1. Introduction

Overview

- 1.1. Waterman Infrastructure & Environment Limited has been instructed by Hogarth Properties Sarl (hereafter referred to as the 'Applicant') to undertake an air quality assessment in relation to the proposed redevelopment of 31 Southampton Row, London, WC1A 2RA within the London Borough of Camden (LBC), hereafter referred to as the 'Site'. The Applicant intends to submit a planning application for the redevelopment of the Site, into a mixed-use development creating residential, retail and office spaces, hereafter referred to as the 'Proposed Development'.

Context

- 1.2. An Air Quality Management Area (AQMA) is an area where there is public exposure to pollutant concentrations that exceed the National Air Quality Strategy Objectives. LBC has declared the whole borough an Air Quality Management Area (AQMA) in relation to exceedances of the annual mean nitrogen dioxide (NO₂) and 24-hour mean particulate matter (PM₁₀) Air Quality Strategy (AQS) objectives.
- 1.3. The Greater London Authority has identified 187 Air Quality Focus Areas (AQFA) in London, these are locations that exceed the EU annual mean limit value for NO₂ and have high levels of human exposure. The southern area of the Site is located within the Holborn High Street and Southampton Row Junction AQFA.
- 1.4. The most significant pollutant during construction relates to the creation of nuisance dust and emissions from construction vehicles and construction plant. A qualitative assessment has been undertaken based on relevant air quality guidance.
- 1.5. With regards to the operational phase, the Environmental Protection UK and Institute of Air Quality Management planning development guidance¹, (EPUK/IAQM guidance) summarised in **Appendix A**, sets out criteria for when an air quality assessment is required to accompany a planning application.
- 1.6. The EPUK/IAQM guidance states an air quality assessment is required if there is a change of:
 - more than 100 Light Duty Vehicles (LDV's) flows in Annual Average Daily Traffic (AADT) within or adjacent to an AQMA or more than 500 AADT elsewhere;
 - more than 25 Heavy Duty Vehicles (HDV) flows AADT within or adjacent to an AQMA or more than 100 AADT elsewhere; or
 - combustion plant where the single or combined NO_x emission rate exceeds 5 mg/sec.
- 1.7. It is estimated the Proposed Development would not result in a change of more than 100 LDVs or 25 HDVs AADT on local roads with relevant receptors and would therefore be below the EPUK/IAQM guidance criteria for when an air quality assessment is required. Additionally, the

¹ Environmental Protection UK & Institute of Air Quality Management (2017), 'Land-Use Planning & Development Control: Planning for Air Quality', EPUK & IAQM, London

Proposed Development would not include a generator or any other centralised combustion plant. The Proposed Development would therefore not give rise to any significant adverse air quality impacts.

- 1.8. Based on the low trip generation and the proposed heating strategy, in accordance with EPUK/IAQM guidance, the Proposed Development is not expected to give rise to air quality impacts. As such the likely effect of the operational Proposed Development on local air quality would be not significant.
- 1.9. The purpose of the air quality assessment is to assess the potential effect of the Proposed Development on local air quality during construction and to qualitatively consider the potential air quality concentrations future users of the Proposed Development would be exposed to.
- 1.10. In accordance with the Mayor of London's Air Quality Neutral Guidance, February 2023², the Proposed Development can be excluded from air quality neutral calculations as the Proposed Development would be 'car-free', would not lead to an increase in motor vehicle movements and not introduce any combustion plant. The Proposed Development would therefore be 'Air Quality Neutral' and has not been considered further within this report.

Report Structure

- 1.11. The remainder of the report is structured as follows:
 - Section 2 – Legislation, Planning Policy and Guidance;
 - Section 3 – Baseline Conditions;
 - Section 4 – Construction Phase;
 - Section 5 – Operational Development; and
 - Section 6 – Summary and Conclusions.
- 1.12. The air quality assessment is supported by:
 - Appendix A: Summary of Relevant Legislation, Planning Policy and Guidance; and
 - Appendix B: Assessor Experience.

² Mayor Of London. 2023. London Plan Guidance, Air Quality Neutral, February 2023.

2. Legislation, Planning Policy & Guidance

General

- 2.1. The following legislation, planning policy and guidance are considered relevant to this air quality assessment. A summary of these documents is provided in **Appendix A**:

Legislation

- EU Framework Directive 2008/50/EC, 2008³;
- Air Quality Standards Regulations, 2010⁴;
- The UK Air Quality Strategy, 2007⁵;
- The Environment Act 1995⁶; and
- The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023⁷.

Planning Policy

- National Planning Policy Framework, December 2023⁸;
- The London Plan: The Spatial Development Strategy for Greater London, March 2021⁹;
- London Environment Strategy, 2018¹⁰; and
- Camden Local Plan, 2017¹¹

Guidance

- Department for Environment, Food and Rural Affairs, Clean Air Strategy, 2019¹²;
- Improving Air Quality in the UK: Tackling Nitrogen Dioxide in our Towns and Cities. UK Air Quality Plan for Tackling Nitrogen Dioxide, 2017¹³;
- Environmental Protection UK & Institute of Air Quality Management Guidance; Land-Use Planning & Development Control: Planning for Air Quality, 2017¹⁴;
- Planning Practice Guidance: Air Quality, 2019¹⁵;
- Local Air Quality Management Policy Guidance, 2022¹⁶;
- Institute of Air Quality Management: Guidance on the Assessment of Dust from Demolition and Construction, Version 2.2 January 2024¹⁷;

3 Council Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe.

4 Defra, (2010) The Air Quality Standards (England) Regulations.

5 Department of the Environment, Food and Rural Affairs (Defra), (2007). 'The Air Quality Strategy for England, Scotland, Wales & Northern Ireland'

6 Office of the Deputy Prime Minister (ODPM), 1995, 'The Environment Act' 1995.

7 The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023

8 Department for Communities and Local Government, 2023, 'National Planning Policy Framework'. DCLG, London.

9 Greater London Authority. 2021. The London Plan: The Spatial Development Strategy for Greater London, March 2021, GLA, London

10 Greater London Authority. 2018. London Environment Strategy, May 2018

11 Camden Local Plan, 2017

12 Defra (2019) Clean Air Strategy, 2019

13 Defra (2017) Improving Air Quality in the UK: Tackling nitrogen dioxide in our towns and cities. Draft UK Air Quality Plan for Tackling Nitrogen Dioxide (Consultation Document)

14 Environmental Protection UK & Institute of Air Quality Management (2017), 'Land-Use Planning & Development Control: Planning for Air Quality', EPUK & IAQM, London.

15 DCLG (2019), 'Planning Practice Guidance: Air Quality (01 November 2019).

16 Defra (2016), 'Local Air Quality Management (LAQM) Policy guidance 2022(LAQM.PG (22))', DEFRA, London

17 Institute of Air Quality Management, 2024, 'Guidance on the Assessment of dust from demolition and construction. January 2024 (Version 2.2)

- London Local Air Quality Management Policy Guidance, 2019¹⁸;
- The Mayor's Air Quality Strategy 'Clearing the Air', 2010¹⁹;
- Mayor of London's Supplementary Planning Guidance: Sustainable Design and Construction, 2014²⁰;
- Mayor of London: The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance, 2014²¹; and
- Camden Clean Air Action Plan, 2023-2026²².

18 Defra (2019), 'London Local Air Quality Management (LLAQM) Policy guidance 2019 (LLAQM.PG (19))', DEFRA, London.

19 Greater London Authority (GLA), 'The Mayor's Air Quality Strategy: Cleaning London's Air', London, 2002.

20 Greater London Authority (2014), 'Sustainable Design and Construction - Supplementary Planning Guidance', Greater London Authority, London.

21 Mayor of London 2014 'The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance'

22 Camden Clean Air Action Plan, 2023-2026, December 2022

3. Baseline Conditions

London Borough of Camden's Review and Assessment Process

- 3.1. LBC has completed all earlier stages of the quality review and assessment as required under the LAQM regime. As a result, LBC has declared the entire borough an AQMA due to exceedances of the annual mean NO₂, and 24-hour mean PM₁₀ objectives. In addition, the southern area of the Site is located within the Holborn High Street and Southampton Row Junction AQFA.
- 3.2. A review of local air quality was undertaken using the LBC Annual Status Report (ASR) for 2022²³.

London Borough of Camden's Local Monitoring

- 3.3. Due to Covid-19, 2020 and 2021 monitoring data was not considered representative of air quality concentrations in the area. 2020 and 2021 monitoring data has therefore not been considered within this report.
- 3.4. In 2022, a full year of NO₂, PM₁₀ and PM_{2.5} monitoring was undertaken within LBC at five automatic monitors. The automatic monitors are:
 - An urban background monitor located in Russell Square Gardens (BL0) approximately 0.5km north-west of the Site (monitoring NO₂, PM₁₀ and PM_{2.5});
 - A roadside monitor located on Euston Road (CD9) approximately 1.2km north-west of the Site (monitoring NO₂, PM₁₀ and PM_{2.5});
 - An urban background / industrial monitor located on Coopers Lane (KGX) approximately 1.7km north-west of the Site (monitoring PM₁₀);
 - A roadside monitor located on Camden High Street (CD010), approximately 2.9km north-west of the Site (monitoring NO₂); and
 - A kerbside monitor located in Swiss Cottage, on Finchley Road (CD1), approximately 4.7km north-west of the Site (monitoring NO₂, PM₁₀ and PM_{2.5}).
- 3.5. The results for the automatic monitors within 2km of the Site are presented in **Table 1** below.

²³ City of London Corporation, 2023, Air Quality Annual Status Report (ASR) for 2022. May 2023

Table 1: Measured Concentrations at automatic monitors within 2km of the Site.

ID	Pollutant	Averaging Period	AQS Objective	Annual Mean NO ₂ Concentration (µg/m ³)		
				2018	2019	2022
BL0	NO ₂	Annual Mean (µg/m ³)	40µg/m ³	36	32	26
		1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	0	0	0
	PM ₁₀	Annual Mean (µg/m ³)	40µg/m ³	17	18	17
		1-Hour Mean (No. of Hours)	50µg/m ³ not to be exceeded more than 35 times a year	1	9	5
	PM _{2.5}	Annual Mean (µg/m ³)	25µg/m ³	10	11	9
					82	70
CD9	NO ₂	Annual Mean (µg/m ³)	40µg/m ³	18	7	2
		1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	18	7	2
	PM ₁₀	Annual Mean (µg/m ³)	40µg/m ³	21	22	21
		1-Hour Mean (No. of Hours)	50µg/m ³ not to be exceeded more than 35 times a year	2	8	6
	PM _{2.5}	Annual Mean (µg/m ³)	25µg/m ³	15	14	12
	KGX	PM ₁₀	Annual Mean (µg/m ³)	40µg/m ³	15	15
1-Hour Mean (No. of Hours)			50µg/m ³ not to be exceeded more than 35 times a year	1	5	5

Notes: Data obtained from LBC Annual Status Report for 2022, August 2023
Exceedances of the AQS Objectives are shown in **bold** text

The results in **Table 1** show the annual mean NO₂ objective of 40µg/m³ was exceeded at the CD9 automatic monitor in 2018, 2019 and 2022. Overall, monitored pollutant concentrations have reduced, or remained similar, from 2018 to 2022 at the three automatic monitors within 2km of the Site.

- 3.6. In 2022, annual mean NO₂ monitoring was undertaken within LBC at 309 locations using diffusion tubes. The monitoring results for the NO₂ diffusion tubes within 0.5km of the Site are presented in **Table 2**.

Table 2: Measured Concentrations at LBC diffusion tubes within 0.5km of the Site

Site ID	Address	Classification	Approximate Distance to Site (km)	Annual Mean NO ₂ Concentrations (µg/m ³)		
				2018	2019	2022
CAM209	Bloomsbury Square	Roadside	0.1	71.3	60.4	-
CAM213	High Holborn (199-206)	Roadside	0.2	59	50.1	-
CAM214	Great Russell Street	Roadside	0.3	52.4	44.6	-
CAM210	St. Joseph's Roman Catholic Primary School (Macklin Street)	Roadside	0.3	37.3	36.3	-
CAM212	Southampton Row	Roadside	0.3	56	51.5	-
CAM183	Russell Square south	Roadside	0.4	45.7	41.5	-
CAM211	High Holborn (174-177)	Roadside	0.4	58.5	54.8	-
CAM227	Bloomsbury Street (1)	Roadside	0.4	92.3	77.5	-
CAM208	Guildford Street	Roadside	0.5	45.5	46.5	-
CAM226	Shaftesbury Avenue (109)	Roadside	0.5	64.7	56.5	-
CAM180	Guildford Street (west end)	Roadside	0.5	56.9	54.1	-
CAM187	Montague Place	Roadside	0.5	42.7	40.7	-
CAM86	Bloomsbury Street	Kerbside	0.5	59.4	49.6	30.8
CAM179	Herbrand Street	Roadside	0.5	53.4	49.0	-
CAM182	Grenville Street	Roadside	0.5	45.7	43.8	29.6
CAM181	Bernard Street	Roadside	0.5	43.2	41.5	-

Notes: Data obtained from LBC Annual Status Report for 2022, August 2023
Exceedances of the AQS Objectives are shown in **bold** text.

- 3.7. The results in **Table 2** show the annual mean NO₂ AQS objective of 40µg/m³ was exceeded at all diffusion tubes within 0.5m of the Site in 2018 and 2019 except for CAM210. The annual mean NO₂ concentrations declined at the two LBC diffusion tubes within 0.5km of the Site from 2018 to 2022, where data is available.

Defra Background Maps

- 3.8. In addition to the monitoring undertaken by LBC, background concentrations of NO_x, NO₂, PM₁₀ and PM_{2.5} are available from the Defra Air Quality Archive for 1 x 1km grid squares for assessment years between 2018 and 2030. **Table 3** presents the 2022 Defra background concentrations for the grid square covering the Site (530500, 181500).

Table 3: Defra Background Map Concentrations for the Grid Square of the Site

Pollutant	AQS Objective	2022 Annual Mean Concentration ($\mu\text{g}/\text{m}^3$)
NO _x	-	74.2
NO ₂	40 $\mu\text{g}/\text{m}^3$	40.6
PM ₁₀	40 $\mu\text{g}/\text{m}^3$	18.9
PM _{2.5}	25 $\mu\text{g}/\text{m}^3$	12.2

Data Source: <http://uk-air.defra.gov.uk>

- 3.9. The data in **Table 3** shows that the annual mean NO₂ AQS objective of 40 $\mu\text{g}/\text{m}^3$ was exceeded in 2022. All other AQS objectives were met in 2022.

4. Construction Phase

Assessment Methodology

Dust Emissions

- 4.1. The Mayor's 'The Control of Dust and Emissions during Construction and Demolition SPG' was based on the IAQM's 2014 Guidance on the Assessment of dust from demolition and construction. The Construction SPG states the IAQM guidance is periodically updated and, therefore, the latest version of the IAQM Guidance should be used.
- 4.2. The assessment of effects of dust emissions from the construction phase has therefore been based on the latest version of the IAQM's Guidance on the Assessment of Dust from Demolition and Construction, published in January 2024 (IAQM Construction guidance) and the following:
 - Consideration of planned construction activities and their phasing; and
 - A review of the location (and distance) of sensitive uses surrounding the Site.
- 4.3. Following the IAQM Construction guidance, construction works were divided into the following four distinct activities:
 - Demolition – any activity involved in the removal of an existing structure (or structures). This may also be referred to as de-construction, specifically when a building is to be removed a small part at a time;
 - Earthworks – soil-stripping, ground-levelling, excavation and landscaping;
 - Construction – any activity involved with the provision of a new structure (or structures), its modification or refurbishment. A structure will include a residential dwelling, office building, retail outlet, road, etc; and
 - Trackout – the transport of dust and dirt from the construction/demolition site onto the public road network, where it may be deposited and then re-suspended by vehicles using the network. This arises when heavy duty vehicles (HDVs) leave the construction/demolition site with dusty materials, which may then spill onto the road, and/or when HDVs transfer dust and dirt onto the road having travelled over muddy ground on site.
- 4.4. IAQM Construction guidance considers the effects of dust, as follows:
 - Annoyance due to dust soiling;
 - Potential effects on human health due to significant increase in exposure to PM₁₀; and
 - Harm to ecological receptors with account being taken of the sensitivity of the area that may experience these effects.
- 4.5. A summary of the four-step process, which was undertaken for the dust of construction activities as set out in the IAQM Construction guidance, is presented in **Table 4**.

Table 4: Summary of the IAQM Construction guidance for Undertaking a Construction Dust Assessment

Step	Description
1	<p>Screen the Need for a Detailed Assessment</p> <p>Simple distance-based criteria are used to determine the requirement for a detailed dust assessment. An assessment will normally be required where there is:</p> <ul style="list-style-type: none"> • A 'human receptor' within: <ul style="list-style-type: none"> – 250m of the boundary of the site; or – 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the site entrance(s). • An 'ecological receptor' within: <ul style="list-style-type: none"> – 50 m of the boundary of the site; or – 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the site entrance(s)
2	<p>Assess the Risk of Dust Impacts</p> <p>The risk of dust arising in sufficient quantities to cause annoyance and/or health and/or ecological impacts should be determined using four risk categories: negligible, low, medium and high risk. A site is allocated to a risk category based on two factors:</p> <ul style="list-style-type: none"> • the scale and nature of the works, which determines the potential dust emission magnitude as small, medium or large (STEP 2A); and • the sensitivity of the area to dust impacts (STEP 2B), which is defined as low, medium or high sensitivity. <p>To determine the risk of impacts with no mitigation applied (STEP 2C), the dust emission magnitude (STEP 2A) is combined with the sensitivity of the area determined (STEP 2B)</p>
3	<p>Site Specific Mitigation</p> <p>The dust risk categories for each of the four activities determined in STEP 2C is used to define the appropriate, site-specific, mitigation measures to be adopted.</p> <p>Local authorities may have a Code for Construction Practice, or equivalent document, that should be taken into account during the development of the mitigation measures.</p> <p>For the cases where the risk is 'negligible' no mitigation measures beyond those required by legislation are required.</p>
4	<p>Determine Significant Effects</p> <p>Once the risk of dust impacts has been determined in STEP 2C and the appropriate dust mitigation measures identified in STEP 3 the final step is to determine whether there are significant effects arising from the construction phase of a proposed development.</p> <p>For almost all construction activity, the aim should be to prevent significant effects on receptors through the use of effective mitigation. Experience shows that this is normally possible. Hence the residual effect will normally be 'not significant'.</p>

Construction Vehicle Emissions

4.6. The IAQM Construction guidance states:

“Experience of assessing the exhaust emissions from on-site plant (NRMM) and site traffic suggests that they are unlikely to make a significant impact on local air quality, and in the vast

majority of cases they will not need to be quantitatively assessed. For site plant and on-site traffic, consideration should be given to the number of plant/vehicles and their operating hours and locations to assess whether a significant effect is likely to occur. For site traffic on the public highway, if it cannot be scoped out (for example by using the EPUK's criteria), then it should be assessed using the same methodology and significance criteria as operational traffic impacts”.

- 4.7. In accordance with the IAQM Construction guidance, it is considered that a quantitative assessment of the exhaust emissions from construction vehicles is not required. Accordingly, a qualitative assessment is deemed appropriate and is provided in this report.

Construction Plant Emissions

- 4.8. In accordance with the London Plan, all construction plant would need to adhere to the emissions standards for NO₂ and PM₁₀ set out for Non-Road Mobile Machinery (NRMM). As such, it is considered the effect of construction plant emissions would be **not significant**, and further assessment is not required. Construction plant emissions has therefore not been considered further.

Determining Significance of Impacts

Dust Emissions

- 4.9. The potential impacts of construction activities on local air quality were based on professional judgement and with reference to the criteria set out in the IAQM Construction guidance. Appropriate mitigation that would be implemented to minimise any adverse impacts on air quality have also been considered. Details of the assessors’ experience and competence to undertake the dust assessment is provided in **Appendix B**.
- 4.10. The assessment of the risk of dust impacts arising from the likely construction activities, as identified by the IAQM Construction guidance, is based on dust emission magnitude (STEP 2A) and the sensitivity of the area (STEP 2B). The matrices presented in **Tables 5 - 8** provide a method of assigning the level of risk for each activity. This should be used to determining the level of mitigation that must be applied.

Table 5: Risk of Dust Impacts - Demolition

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Medium Risk
Medium	High Risk	Medium Risk	Low Risk
Low	Medium Risk	Low Risk	Negligible

Table 6: Risk of Dust Impacts - Earthworks

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 7: Risk of Dust Impacts - Construction

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 8: Risk of Dust Impacts - Trackout

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Low Risk	Negligible
Low	Low Risk	Low Risk	Negligible

- 4.11. The risk of dust impact determined for each construction activity type is used to define the appropriate mitigation measures that must be applied.

Construction Vehicle Emissions

- 4.12. The significance of the effects from construction vehicle exhaust emissions on local air quality was based on professional judgement.

Construction Phase Effects

Dust Emissions

- 4.13. Construction activities of the Development have the potential to affect local air quality through Demolition, Earthworks, Construction and Trackout activities, as described above.
- 4.14. The Site is in a predominantly commercial area with more than one commercial premises within 20m of the Site. The nearest high sensitive receptors are the Guildhouse School located 55m west of the Site; and Stafford House London and Kaplan International Language schools both located 65m south-west of the Site. In accordance with **Table 4**, the assessment will proceed to a detailed assessment.

- 4.15. There are no designated ecological sites within 50m of the boundary of the Site or 50m of the route(s) used by construction vehicles on the public highway, up to 250m from the site entrance(s). Harm to ecological receptors has therefore not been considered further.

Potential Dust Emission Magnitude

Demolition

Demolition is not due to take place as the Site is being refurbished. As a result, demolition has not been considered further.

Earthworks

- 4.16. The Site area is approximately 700m². Based on this and considering the criteria in step 2A of the IAQM Construction guidance, the potential dust emissions during earthworks activities could be of **small** magnitude.

Construction

- 4.17. It is estimated the construction materials used during the refurbishment will have a low potential for dust release. Based on this and considering the criteria in step 2A of the IAQM Construction guidance, the potential for dust emissions due to construction activities would be of **small** magnitude.

Trackout

- 4.18. It is estimated the number of HDV trips leaving the Site would be less than 20 outward movements in any one day. Based on this and considering the criteria in step 2A of the IAQM Construction guidance, the potential for dust emissions due to trackout activities would be of **small** magnitude.

Sensitivity of the Area

- 4.19. The sensitivity of the area to each main activity has been assessed based on the number and distance of the nearest sensitive receptors to the activity, and the sensitivity of these receptors to dust soiling and human health.

Sensitivity of the Area to Dust Soiling Effects on People and Property

- 4.20. From the three schools, there are more than 100 high sensitive receptors within 100m of the Site boundary. On this basis, as set out in Table 2 of the IAQM Construction guidance, the sensitivity of the area to dust soiling is **medium**.

Sensitivity of the Area to Human Health Impacts

- 4.21. As shown in **Table 1**, the annual mean PM₁₀ concentration at the LBC BL0 automatic monitor was 17.0µg/m³ in 2022 - below the annual mean AQS PM₁₀ objective of 40µg/m³. On this basis, as set out in Table 3 of the IAQM Construction guidance, and that there are estimated to be more than 10 retail uses within 20m, the sensitivity of the area to human health impacts is **low**.

Dust Risk Summary

- 4.22. The dust risk categories, based on the potential magnitude of dust emissions and the sensitivity of the area to dust, are presented in **Table 9**.

Table 9: Summary of Dust Risk

Receptor Sensitivity	Sensitivity of the Surrounding Area		
	Earthworks	Construction	Trackout
Dust Soiling	Low Risk	Low Risk	Low Risk
Human Health	Negligible Risk	Negligible Risk	Negligible Risk

- 4.23. The Site is considered **low risk** during the construction phase. Therefore, a range of mitigation measures, appropriate to low risk sites, would be developed. The mitigation measures would be included within a Construction Environmental Management Plan and implemented to prevent the release of dust entering the atmosphere and / or being deposited on nearby receptors.
- 4.24. The mitigation measures are an inherent part of the Development, required by regulations and would be secured by planning conditions. The mitigation measures would ensure the effect of dust emissions would be **not significant**.

Construction Vehicle Exhaust Emissions

- 4.25. At this stage, the number of HDVs associated with the Proposed Development is not known. However, based on the size of the Site, it is estimated that number of HDVs would be less than 20 HDV movements in any one day. Emissions from construction traffic would be relatively small compared to existing road traffic emissions on the A40 (17,292 daily vehicles including 13.3% HDV)²⁴. Therefore, the likely effect of construction vehicles entering and egressing the Site on air quality would be **not significant** during the construction period.

Construction Mitigation Measures and Residual Effects

Dust Emissions

- 4.26. The implementation of the inherent mitigation measures to prevent the release of dust entering the atmosphere and / or being deposited on nearby receptors, would ensure the likely residual effect of dust emissions would be **not significant**.

Construction Vehicle Emissions

- 4.27. All construction traffic logistics would be agreed with LBC. Consideration would also be given to the avoidance, or limited use, of traffic routes in proximity to sensitive uses and the avoidance, or limited use, of roads during peak hours, where practicable. The likely residual effect of construction vehicles entering and egressing the Site on air quality would remain **not significant**.

²⁴ Department for Transport. 2024. Road traffic statistics - Manual count point: 93123. Accessed on 21/03/2024. Available at: <https://roadtraffic.dft.gov.uk/manualcountpoints/93123>

5. Operational Development

Effect of the Proposed Development on Local Air Quality

- 5.1. The car-free Proposed Development would have a beneficial impact on air quality as it would reduce users of the Proposed Development travelling to and from the Proposed Development by car.
- 5.2. It is estimated the Proposed Development would not generate any vehicle trips aside from servicing activity and taxis. The change in vehicle trips associated with the Proposed Development would therefore be below the EPUK/IAQM guidance criteria for developments within an AQMA. The effect of the Proposed Development on ambient air quality would therefore be **not significant**.
- 5.3. Additionally, the Proposed Development would not include a generator or any other centralised combustion plant or other sources that would generate significant pollutant emissions. Considering the low vehicle trip generation rate and the absence of combustion plant, according to the EPUK/IAQM guidance, the Proposed Development would not be expected to give rise to significant air quality impacts.
- 5.4. The effect of the Proposed Development on local air quality was therefore considered to be **not significant**.

Predicted Future Exposure (Office and Retail Users)

- 5.5. In accordance with LAQM.TG(22)²⁵ only the short-term AQS Objectives apply for employment uses. Research²⁶ undertaken in support of LAQM.TG(22) has indicated that the 1-hour mean AQS objective for NO₂ is unlikely to be exceeded at a location where the annual-mean NO₂ concentration is less than 60µg/m³.
- 5.6. The LBC diffusion tube located at Bloomsbury Square (CAM209) was considered representative of annual mean NO₂ concentrations at the Site as it is located a similar distance from the A40. The monitoring data shows the 2022 annual mean NO₂ concentration of would be below 60µg/m³ at the Bloomsbury Square (CAM209) roadside diffusion tube.
- 5.7. The LBC Russel Square Gardens (BL0) automatic monitor was considered representative of annual mean PM₁₀ and PM_{2.5} concentrations at the Site.
- 5.8. Based on the pollutant concentrations shown in **Tables 1 - 3**, it is considered the AQS objectives are likely to be met for future office and retail users of the Site. The effect of the Proposed Development on air quality would therefore be **not significant**.

Predicted Future Exposure (Residential Units)

- 5.9. WSP | Parsons Brinckerhoff prepared 'City Air Quality At Height – Lessons For Developers & Planners²⁷' in 2017. The report examines how air quality improves with height using collated data from air quality monitoring undertaken at height from local authorities in London and monitoring undertaken in London and Cardiff. The report summarises 'Average NO₂ concentrations at monitored 'roadside' locations indicated a reduction with height of approximately 50% to 60% between the ground and fourth floor. Beyond the fourth floor the data indicates that there is no further significant reduction in NO₂ concentrations with height'

²⁵ Defra, 2022, Local Air Quality Management Technical Guidance, August 2022

²⁶ AEA, 'Analysis of the relationship between annual-mean nitrogen dioxide concentration and exceedances of the 1-hour mean AQS Objective', 2008.

²⁷ WSP | Parsons Brinckerhoff. 2017. 'City Air Quality At Height – Lessons For Developers & Planners'. London

- 5.10. As a result, the LBC ground level concentrations were not considered representative of concentrations future residential users of the Site would be exposed to as the residential users of the Proposed would be located on the 5th floor. For a conservative assessment, it was considered the annual mean NO₂ concentrations for the residential units would reduce by 50% when compared to ground-level pollution level concentrations.
- 5.11. The LBC diffusion tube located at Bloomsbury Square (CAM209) was considered representative of annual mean NO₂ concentrations at the Site. When reduced by 50%, the annual mean NO₂ concentration would be below the AQS objective of 40µg/m³ between 2018 and 2022. As a result, it is considered the AQS objectives are likely to be met for future residential users of the Site.
- 5.12. The LBC Russel Square Gardens (BL0) automatic monitor was considered representative of annual mean PM₁₀ and PM_{2.5} concentrations at the Site. Based on the pollutant concentrations shown in **Tables 1 - 3**, it is considered the PM₁₀ and PM_{2.5} AQS objectives are likely to be met for future residential users of the Site.
- 5.13. The effect of the Development on future residential users would therefore be **not significant**.

Mitigation Measures

- 5.14. As identified above, even in the absence of mitigation, the effect of the Proposed Development on local air quality would be **not significant**. Accordingly, mitigation measures would not be required, and residual effects would also be **not significant**.

6. Summary And Conclusions

- 6.1. A qualitative assessment of dust effects during the construction phase has been carried out using the IAQM Construction guidance. The implementation of a range of appropriate site management practices to control dust emissions would significantly reduce the potential for adverse nuisance dust effects associated with the various stages of the works. It is considered the effects due to dust emissions would be **not significant**.
- 6.2. The effect of construction vehicles entering and egressing the Site during the construction phase would be **not significant**.
- 6.3. It is estimated the Proposed Development would not generate any vehicle trips aside from servicing activity and taxis. It is estimated the Proposed Development would not generate any vehicle trips aside from servicing activity and taxis. In addition, the Proposed Development would not include a generator or any other centralised combustion plant, and therefore would not give rise to any significant adverse air quality impacts.
- 6.4. Based on the low trip generation and the absence of a centralised combustion plant, according to the EPUK/IAQM guidance, the Proposed Development is not expected to give rise to significant air quality impacts. As such the likely effect of the operational Proposed Development on local air quality would be **not significant**.
- 6.5. A review of the LBC monitoring data and Defra background maps indicate that pollutant concentrations for users of the Proposed Development would be **not significant**.

APPENDICES

A. Summary of Relevant Legislation, Planning Policy and Guidance

Appendix A: Summary of Relevant Legislation, Planning Policy and Guidance

Legislation

EU Framework Directive 2008/50/EC, 2008

Air pollutants at high concentrations can have adverse effects on the health of humans and ecosystems. European Union (EU) legislation on air quality forms the basis for UK legislation and policy on air quality.

The EU Framework Directive 2008/50/EC on ambient air quality assessment and management came into force in May 2008 and was implemented by Member States, including the UK, by June 2010. The Directive aims to protect human health and the environment by avoiding, reducing or preventing harmful concentrations of air pollutants.

Air Quality Standards Regulations, 2010

The Air Quality Standards Regulations implement Limit Values prescribed by the EU Framework Directive 2008/50/EC. The Limit Values are legally binding and the Secretary of State, on behalf of the UK Government, is responsible for their implementation.

The UK Air Quality Strategy, 2007

The current UK Air Quality Strategy (UK AQS) was published in July 2007 and sets out the objectives for local planning authorities (LPA) in undertaking their Local Air Quality Management (LAQM) duties. The UK AQS objectives of air pollutants relevant to this assessment are summarised in **Table A1**.

Table A1: Summary of Relevant UK AQS Objectives

Pollutant	Objective		Date by which Objective to be Met
	Concentration	Measured as	
Nitrogen Dioxide (NO ₂)	200µg/m ³	1 hour mean not to be exceeded more than 18 times per year	31/12/2005
	40µg/m ³	Annual Mean	31/12/2005
Particulate Matter (PM ₁₀) ^(a)	50µg/m ³	24 hour mean not to be exceeded more than 35 times per year	31/12/2004
	40µg/m ³	Annual Mean	31/12/2004
Particulate Matter (PM _{2.5}) ^(b)	Target of 15% reduction in concentrations at urban background locations	Annual Mean	Between 2010 and 2020
	25µg/m ³	Annual Mean	01/01/2020

Note: (a) Particulate matter with a mean aerodynamic diameter less than 10 microns (or micrometres – µm)
(b) Particulate matter with a mean aerodynamic diameter less than 2.5 microns

Further to **Table A1**, the European Union (EU) also sets Limit Values for NO₂, PM₁₀ and PM_{2.5}, which have been adopted by the UK. The Limit Value for NO₂ is the same numerical level as the AQS objective but the target date differs. Achievement of these values is a national obligation rather than a local obligation. In the UK, only monitoring and modelling carried out by Defra and Central Government meets the specification required to assess compliance with the Limit Values. Further, Defra and other central government agencies do not recognise local authority monitoring or local modelling studies when determining the likelihood of the Limit Values being exceeded. As such the Limit Values have not been considered further in the Air Quality Assessment.

The Environment Act, 1995

In a parallel process, the Environment Act 1995 required the preparation of a national air quality strategy setting health-based air quality objectives for specified pollutants and outlining measures to be taken by LPAs in relation to meeting these objectives (the LAQM system).

Part IV of the Environment Act 1995 provides a system of LAQM under which LPAs are required to review and assess the future quality of the air in their area by way of a staged process. Should this process suggest that any of the AQS objectives will not be met by the target dates, the LPA must consider the declaration of an Air Quality Management Area (AQMA) and the subsequent preparation of an Air Quality Action Plan (AQAP) to improve the air quality in that area in pursuit of the AQS objectives.

The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023

The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 sets the following targets:

- annual mean PM_{2.5} concentration in ambient air must be equal to or less than 10 µg/m³ by the end of 31st December 2040; and
- at least a 35% reduction in population exposure when compared with the average population exposure in the baseline period (1st January 2016 to 31st December 2018) by the end of 31st December 2040.

Planning Policy

National Planning Policy Framework, 2023

The National Planning Policy Framework (NPPF), published in December 2023 sets out the Government's planning policies for England and how these should be applied.

Paragraph 109 states *“The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.”*

Paragraph 180 states *“Planning policies and decisions should contribute to and enhance the natural and local environment by: ... preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans”*

Paragraph 191 states *“Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.”*

Paragraph 192 states *“Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should*

ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.”.

Regional Planning Policy

The London Plan: The Spatial Development Strategy for Greater London, March 2021

The Mayor of London's London Plan will run to 2041 to provide a longer-term view of London's development to inform decision making.

Policy SI1 'Improving air quality' states that:

“A. Development plans, through relevant strategic, site specific and area-based policies should seek opportunities to identify and deliver further improvements to air quality and should not reduce air quality benefits that result from the Mayor's or boroughs' activities to improve air quality.

B. To tackle poor air quality, protect health and meet legal obligations the following criteria should be addressed:

1. Development proposals should not:

- a) lead to further deterioration of existing poor air quality*
- b) create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits*
- c) create unacceptable risk of high levels of exposure to poor air quality.*

2. In order to meet the requirements in Part 1, as a minimum:

- a) Development proposals must be at least air quality neutral*
- b) Development proposals should use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality in preference to post-design or retro-fitted mitigation measures*
- c) Major development proposals must be submitted with an Air Quality Assessment. Air quality assessments should show how the development will meet the requirements of B1*
- d) Development proposals in Air Quality Focus Areas or that are likely to be used by large numbers of people particularly vulnerable to poor air quality, such as children or older people, which do not demonstrate that design measures have been used to minimise exposure should be refused.*

C. Masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment should consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach. To achieve this a statement should be submitted demonstrating:

- a) How proposals have considered ways to maximise benefits to local air quality, and*
- b) What measures or design features will be put in place to reduce exposure to pollution, and how they will achieve this.*

D. In order to reduce the impact on air quality during the construction and demolition phase development proposals must demonstrate how they plan to comply with the Non-Road Mobile Machinery Low Emission Zone and reduce emissions from the demolition and construction of buildings following best practice guidance.

E. Development proposals should ensure that where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is done on-site. Where it can be demonstrated that emissions cannot be further reduced by on-site measures, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated within the area affected by the development’.

It may not always be possible in practice for developments to achieve Air Quality Neutral standards or to acceptably minimise impacts using on-site measures alone. If a development can demonstrate that it has exploited all relevant on-site measures it may be possible to make the development acceptable through additional mitigation or offsetting payments”.

London Environment Strategy, 2018

The London Environment Strategy includes the following proposals to improve air quality:

The introduction of the toxicity charge (T-charge) from October 2017 and the Ultra-Low Emission Zone by 2019;

Making the whole bus fleet zero emission by 2037 and phasing out fossil fuels in the taxi and private hire fleets;

The Mayor working with government and other partners to seek reductions in emissions from aviation activity (in London and the south east particularly from Heathrow), and also from rail transport and at stations;

Providing better information about air quality, especially during high and very high pollution episodes;

Using the planning system to help ensure that new schools and other buildings that will be used by people who are particularly vulnerable to pollutants are not located in areas of poor air quality;

The Mayor promoting and prioritising more sustainable travel in London including walking, cycling and public transport, as part of the Healthy Streets Approach; and

Considering introducing a new Air Quality Positive standard so new building developments would ensure that emissions and exposure to pollution are reduced.

Local Planning Policy

Camden Local Plan, July 2017

The current adopted LBC Local Plan sets out the council's vision, strategy, objectives and policies for the borough.

Regarding air quality, Policy CC4 Air quality states:

“The Council will ensure that the impact of development on air quality is mitigated and ensure that exposure to poor air quality is reduced in the borough.

The Council will take into account the impact of air quality when assessing development proposals, through the consideration of both the exposure of occupants to air pollution and the effect of the development on air quality. Consideration must be taken to the actions identified in the Council’s Air Quality Action Plan.

Air Quality Assessments (AQAs) are required where development is likely to expose residents to high levels of air pollution. Where the AQA shows that a development would cause harm to air quality, the Council will not grant planning permission unless measures are adopted to mitigate the impact. Similarly, developments that introduce sensitive receptors (i.e. housing, schools) in locations of poor air quality will not be acceptable unless designed to mitigate the impact.

Development that involves significant demolition, construction or earthworks will also be required to assess the risk of dust and emissions impacts in an AQA and include appropriate mitigation measures to be secured in a Construction Management Plan.”

Policy A1 Managing the impact of development states:

“The Council will seek to protect the quality of life of occupiers and neighbours. We will grant permission for development unless this causes unacceptable harm to amenity.

We will:

- a) seek to ensure that the amenity of communities, occupiers and neighbours is protected;*
- b) seek to ensure development contributes towards strong and successful communities by balancing the needs of development with the needs and characteristics of local areas and communities;*
- c) resist development that fails to adequately assess and address transport impacts affecting communities, occupiers, neighbours and the existing transport network; and*
- d) require mitigation measures where necessary*

The factors we will consider include:

- a) visual privacy, outlook;*
- b) sunlight, daylight and overshadowing;*
- c) artificial lighting levels;*
- d) transport impacts, including the use of Transport Assessments, Travel Plans and Delivery and Servicing Management Plans;*
- e) impacts of the construction phase, including the use of Construction Management Plans;*
- f) noise and vibration levels;*
- g) odour, fumes and dust;*
- h) microclimate;*
- i) contaminated land; and*
- j) impact upon water and wastewater infrastructure.”*

Guidance

Department for Environment, Food and Rural Affairs, Clean Air Strategy, 2019

Published in January 2019 the Clean Air Strategy sets out a coherent framework and national action to improve air quality throughout the UK.

The Strategy is underpinned by new national powers to control major sources of air pollution, in line with the risk they pose to public health and the environment, plus new local powers to act in areas with an air pollution problem. The Strategy also supports the creation of Clean Air Zones to lower emissions from all sources of air pollution, backed up with clear enforcement mechanisms.

Improving Air Quality in the UK: Tackling Nitrogen Dioxide in our Towns and Cities. UK Air Quality Plan for Tackling Nitrogen Dioxide, 2017

The UK Government was required by the High Court to release an Air Quality Plan to meet the NO₂ Limit Value in the shortest timescale as possible. This document was adopted on 26th July 2017.

The plan focuses on reducing concentrations of NO_x and NO₂ around road vehicle emissions within the shortest possible time. With the principal aims to:

- a. reduce emissions of NO_x from the current road vehicle fleet in problem locations now; and*
- b. accelerate road vehicle fleet turnover to cleaner vehicles to ensure that the problem remains addressed and does not move to other locations.*

The other aims include reducing background concentrations of NO_x from:

Other forms of transport such as rail, aviation and shipping;

Industry and non-road mobile machinery; and

Buildings, both commercial and domestic, and other stationary sources.

The Plan provides measures to reduce NO_x and NO₂ concentrations in the UK, such measures include:

Mandate local authorities to implement Clean Air Zones within the shortest possible time;

Consultation on proposal for a Clean Air Zone Framework for Wales;

Consultation on a draft National Low Emission Framework for Scotland;

Commitment to establishing a Low Emission Zone for Scotland by 2018;

Tackling air pollution on the English Road network;

New real driving emissions requirement to address real world NO_x emissions;

Additional funding to accelerate uptake of hydrogen vehicles and infrastructure;

Additional funding to accelerate the uptake of electric taxis;

Further investment in retrofitting alongside additional support of low emission buses and taxis;

Regulatory changes to support the take up of alternatively fuelled light commercial vehicles;

Exploring the appropriate tax treatment for diesel vehicles;

Call for evidence on updating the existing HGV Road User Levy;

Call for evidence on use of red diesel;

Ensure wider environmental performance is apparent to consumers when purchasing cars;

Updating Government procurement policy;

New emissions standards for non-road mobile machinery;

New measures to tackle NO_x emissions from Medium Combustion Plants; and

New measures to tackle NO_x emissions from generators.

The above measures do not provide any actions which are relevant to the operation or design of the Development.

A High Court ruling on 21st February 2018, stated the UK Governments air quality improvement plan adopted on 31st July 2017 was unlawful as *'it does not contain measures sufficient to ensure substantive compliance with the 2008 Directive and the English Regulations'*. The UK Government *'must ensure steps are taken to achieve compliance as soon as possible, by the quickest route possible and by a means that makes that outcome likely'*.

The judgement stated that the UK Government must produce a supplementary plan, setting out requirements for feasibility studies to be undertaken in the 33 Local Authority Areas. Greater London including LBM is not considered within this judgement.

Environmental Protection UK & Institute of Air Quality Management Guidance; Land-Use Planning & Development Control: Planning for Air Quality, 2017

Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) provide guidance for air quality considerations within the local development control processes, promoting a consistent approach to the treatment of air quality issues.

The EPUK and IAQM guidance explains how development proposals can adopt good design principles to reduce emissions and contribute to better air quality. The guidance also provides a method for screening the need for an air quality assessment and a consistent approach for describing the impacts at individual receptors. The EPUK and IAQM Guidance, advises that:

"In arriving at a decision about a specific proposed development the local planning authority is required to achieve a balance between economic, social and environmental considerations. For this reason, appropriate consideration of issues such as air quality, noise and visual amenity is necessary. In terms of air quality, particular attention should be paid to:

Compliance with national air quality objectives and of EU Limit Values;

Whether the development will materially affect any air quality action plan or strategy;

The overall degradation (or improvement) in local air quality; or

Whether the development will introduce new public exposure into an area of existing poor air quality".

Planning Practice Guidance: Air Quality, 2019

The Government's online Planning Practice Guidance (PPG) states that all development plans can influence air quality in several ways including the development proposals, location and any provision made for sustainable transport. Consideration of air quality issues at the plan-making stage can ensure a strategic approach to air quality and help secure net improvements in overall air quality where possible.

Whether air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to have an adverse effect on air quality in areas where it is already known to be poor, particularly if it could affect the implementation of air quality strategies and action plans and/or breach legal obligations (including those relating to the conservation of habitats and species). Air quality may also be a material consideration if the proposed development would be particularly sensitive to poor air quality in its vicinity.

Where air quality is a relevant consideration the local planning authority may need to establish:

- the 'baseline' local air quality, including what would happen to air quality in the absence of the development;
- whether the proposed development could significantly change air quality during the construction and operational phases (and the consequences of this for public health and biodiversity); and
- whether occupiers or users of the development could experience poor living conditions or health due to poor air quality.

Institute of Air Quality Management: Guidance on the Assessment of Dust from Demolition and Construction, 2024

The IAQM Construction Dust Guidance provides guidance to consultants and Environmental Health Officers (EHOs) on how to assess air quality impacts from construction related activities. The guidance provides a risk-based approach based on the potential dust emission magnitude of the site (small, medium or large) and the sensitivity of the area to dust impacts. The importance of professional judgement is noted throughout the guidance. The guidance recommends that once the risk class of the site has been identified, the appropriate level of mitigation measures are implemented to ensure that the construction activities have no significant impacts.

London Local Air Quality Management Policy Guidance, 2019

The Local Air Quality Management Policy Guidance LAQM.PG(19) provides guidance to improve local air quality using available levers, including planning, public health and transport responsibilities. LAQM.PG(19) describes how power stations, motor vehicles, industrial and domestic combustion processes all contribute to local air pollution. Transport initiatives are set out to illustrate how transport measures may bring improvements in air quality.

The Mayor's Air Quality Strategy 'Clearing the Air', 2010

The Greater London Authority (GLA) Act 1999 requires the GLA to produce an AQS for Greater London that sets out air quality objectives (to be no less stringent than national objectives) and present measures that the Mayor, GLA and London Boroughs will take towards meeting these objectives. The Mayor's AQS aims to improve air quality within London by targeting the reduction of emissions related to transport and construction. Some of the initiatives proposed are as follows:

Targeted measures for areas with poor air quality; and

Use of the planning system for reducing emissions from new developments.

Mayor of London's Supplementary Planning Guidance: Sustainable Design and Construction, 2014

The Sustainable Design and Construction Supplementary Planning Guidance (SPG) provides guidance to support the implementation of the London Plan. Section 4.3 of the SPG focusses on air pollution and the effects from the construction and operation of new developments to ensure that they are 'Air Quality Neutral'. Emission benchmarks are provided within the SPG for:

- Emissions from buildings; and
- Transport emissions.

The SPG sets out the criteria for when an Air Quality Neutral Assessment is required. This includes:

- For dwellings: where 10 or more are to be constructed (or if number not given, area is more than 0.5 hectares); and/or
- For all other uses: where the floor space is 1000 square metres or more (or the size area is 1 hectare or more,

Section 4.3.17 and Appendix 5 of the SPG note that two sets of Building Emission Benchmarks (BEBs) have been defined for a series of land-use classes, one for NO_x and one for PM₁₀. Section 4.3.18 and Appendix 6 of the SPG note that the design of a development should encourage and facilitate walking, cycling and the use of public transport, thereby minimising the generation of air pollutants.

Mayor of London: The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance, 2014

The Control of Dust and Emissions during Construction and Demolition SPG seeks to reduce emissions of dust, PM₁₀ and PM_{2.5} from construction and demolition activities in London. It also aims to manage emissions of NO_x from construction and demolition plant by means of a new non-road mobile machinery Ultra-Low Emissions Zone (ULEZ). The SPG provides guidance on the implementation of London Plan Policy 7.14 'Improving Air Quality', as well as a range of policies that deal with environmental sustainability, health and quality of life.

Camden Clean Air Action Plan, 2023-2026

The LBC Clean Air Strategy outlines the actions LBC will take to improve air quality. The key themes within the action plan include:

- 1) Construction and development: Reducing the impact of air pollution from construction and development on public health;
- 2) Buildings: Reducing the impact of air pollution from building operation and use (heating, power, and commercial and industrial processes) on public health;
- 3) Transport: Reducing the impact of air pollution from transport on public health;
- 4) Communities and schools: Supporting and empowering communities and schools to reduce and avoid exposure to air pollution;
- 5) Indirect emissions and lobbying: Leading by example, working with others, and advocating for greater action on air quality and health;
- 6) Public health and awareness: Helping everyone to be aware of the importance of clean air and the roles we all have in protecting health; and
- 7) Indoor air quality and occupational exposure: Raising awareness about the causes and impact of poor indoor air quality and workplace air pollution exposure.

B. Assessor Experience

Appendices

31 Southampton Row, London, WC1A 2RA

Project Number: WIE20620

Document Reference: 20620100-WAT-XX-XX-RP-N-720001_P01.01_S1

Appendix B: Assessor Experience

Name: Stephanie Jones

Years of Experience: <1

Qualifications:

- BSc (Hons) Geography
- MSc Environmental Consultancy

Stephanie is a Graduate Consultant working within the EIA and Air Quality team; with one year of experience assisting with the co-ordination of EIAs and preparing Environmental Statements for a range of projects for a variety of clients in both the public and private sector.

Name: Andy Fowler

Years of Experience: 13

Qualifications:

- CEnv
- BSc (Hons)
- Member of the IAQM
- Full Member of the Institution of Environmental Sciences (IES)

Andy has been responsible for the technical delivery of a wide range of air quality projects for a variety of clients in both the public and private sector. These projects include consideration of emissions from both transportation and industrial sources, through both monitoring and modelling, and therefore he has an in depth understanding of the regulatory requirements for these sources and the published technical guidance for their assessment.

We are Waterman, where every project matters

We deliver progressive, sustainability-driven environmental and engineering consultancy services across every sector. We think differently, and we're harnessing our collective expertise to deliver greener, healthier and well-connected communities, networks and built environments.

Based in strategic locations throughout the UK and Ireland, our team of specialists is at the forefront of tackling the climate emergency and forging a path to a Net Zero built environment.

UK & Ireland Office Locations



Appendices

31 Southampton Row, London, WC1A 2RA

Project Number: WIE20620

Document Reference: 20620100-WAT-XX-XX-RP-N-720001_P01.01_S1