

# Air Quality Management Plan

83-89 Manor Way, Ruislip

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**Title:**

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Air Quality Management Plan

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## 1 INTRODUCTION

### 1.1 Scope

GEM Air Quality Ltd has been commissioned to undertake an air quality management plan in relation to a proposed development at 83-89 Manor Way in Ruislip. The development proposals are as follows:

*Erection of a detached bungalow with associated landscaping works following demolition of existing private garages.*

The impact of local air quality across the proposed development is not considered significant, as outlined in the following sections. Based on this evidence the impact of local air quality across the proposed development is not considered significant.

As per the joint air quality planning guidance issued by Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM)<sup>1</sup>, a full air quality impact assessment can be screened out as the proposed development would generate <100 daily vehicle. As such, the remainder of this air quality management plan has focused on the impacts during construction and the air quality neutral assessment.

#### 1.1.1 UK Air Quality Limits

The UK Government and the devolved administrations published the latest Air Quality Strategy for England, Scotland, Wales and Northern Ireland on 17 July 2007<sup>2</sup>. The Strategy provides an over-arching strategic framework for air quality management in the UK.

With regards to this assessment, the Air Quality Strategy contains national air quality standards and objectives established by the Government to protect human health. The objectives for nitrogen dioxide and particulates (PM<sub>10</sub> and PM<sub>2.5</sub>) have been set. Those which are limit values required by EU Daughter Directives on Air Quality have been transposed into UK law through the Air Quality Standards (Amendment) Regulations 2016 and the Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020. Table 1 provides the UK Air Quality Objectives for NO<sub>2</sub> and PM.

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<sup>1</sup> Land-Use Planning & Development Control: Planning for Air Quality. Guidance from Environmental Protection UK and the Institute of Air Quality Management for the consideration of air quality within the land-use planning and development control processes. EPUK & IAQM. January 2018

<sup>2</sup> The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, Department for Environment, Food and Rural Affairs in partnership with the Scottish Executive, Welsh Assembly Government and Department of the Environment Northern Ireland, July 2007



**Table 1 – UK Air Quality Objectives for Nitrogen Dioxide and Particulate Matter**

Pollutant	Objective	Concentration measured as	Obligation
<b>Particles (PM<sub>10</sub>)</b>	50µg/m <sup>3</sup> not to be exceeded more than 35 times a year	24 hour mean	All local authorities
	40µg/m <sup>3</sup>	Annual mean	All local authorities
<b>Particles (PM<sub>2.5</sub>)</b>	20µg/m <sup>3</sup> <sup>(a)</sup>	Annual Mean	England only (encouraged in Wales)
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>	200µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1 hour mean	All local authorities
	40µg/m <sup>3</sup>	Annual mean	All local authorities
(a) The Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020 is an amendment to the existing regulations and reduces the threshold for PM <sub>2.5</sub> from 25 µg/m <sup>3</sup> to 20 µg/m <sup>3</sup> .			

### 1.1.2 Local Air Quality Monitoring

Local air quality monitoring undertaken by the London Borough of Hillingdon and is summarised in Table 2 below. These are the closest monitoring sites to the proposed development. Recorded concentrations at this site in 2024 are below the relevant air quality objectives provided in Table 1.

**Table 2 – Local Air Quality (NO<sub>2</sub>) Monitoring, µg/m<sup>3</sup>**

Site ID	Location	X	Y	Type	2024
<b>HILL36</b>	Lamppost outside Vodafone, 69 High Street Ruislip. HA4 8JB	509275	187340	Roadside	25.7
<b>HILL37</b>	2/6 High St. Ruislip Lamppost with Parking and church sign. HA47AW	509097	187597	Roadside	23.5
<b>HILL43</b>	Lamppost outside tattoo and Five star nail parlours, No 60, Victoria Road. HA40AH	510134	187086	Roadside	20.3
<b>Air Quality Objective</b>					<b>40.0</b>



### 1.1.3 Local Background Air Quality

Background NO<sub>x</sub>, NO<sub>2</sub> and PM concentrations have been obtained from Defra<sup>3</sup> and are provided in Table 3. These 1 km x 1 km grid resolution maps are derived from a base year of 2021, which have been adjusted to the current baseline (2024). The current baseline (2024) corresponds with the latest monitoring data available from the Council. Background concentrations across the proposed development are below the relevant air quality objectives, which are shown in Table 1.

**Table 3 – Background NO<sub>x</sub>, NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations, µg/m<sup>3</sup>**

Pollutant	X	Y	2024
NO <sub>2</sub>	509500	187500	13.0
NO <sub>x</sub>			17.4
PM <sub>10</sub>			12.8
PM <sub>2.5</sub>			7.9

### 1.1.4 London Atmospheric Emissions Inventory (LAEI)

Pollution maps for 2025 derived from the updated LAEI (2022) are shown in Figures 1, 2 and 3. They indicate that the annual mean concentrations for NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> across the proposed development would be below the relevant air quality objectives, which are shown in Table 1.

<sup>3</sup> <http://uk-air.defra.gov.uk/data/laqm-background-maps?year=2021>



Figure 1 – LAEI Modelled Nitrogen Dioxide (NO<sub>2</sub>) Concentrations (µg/m<sup>3</sup>), 2025

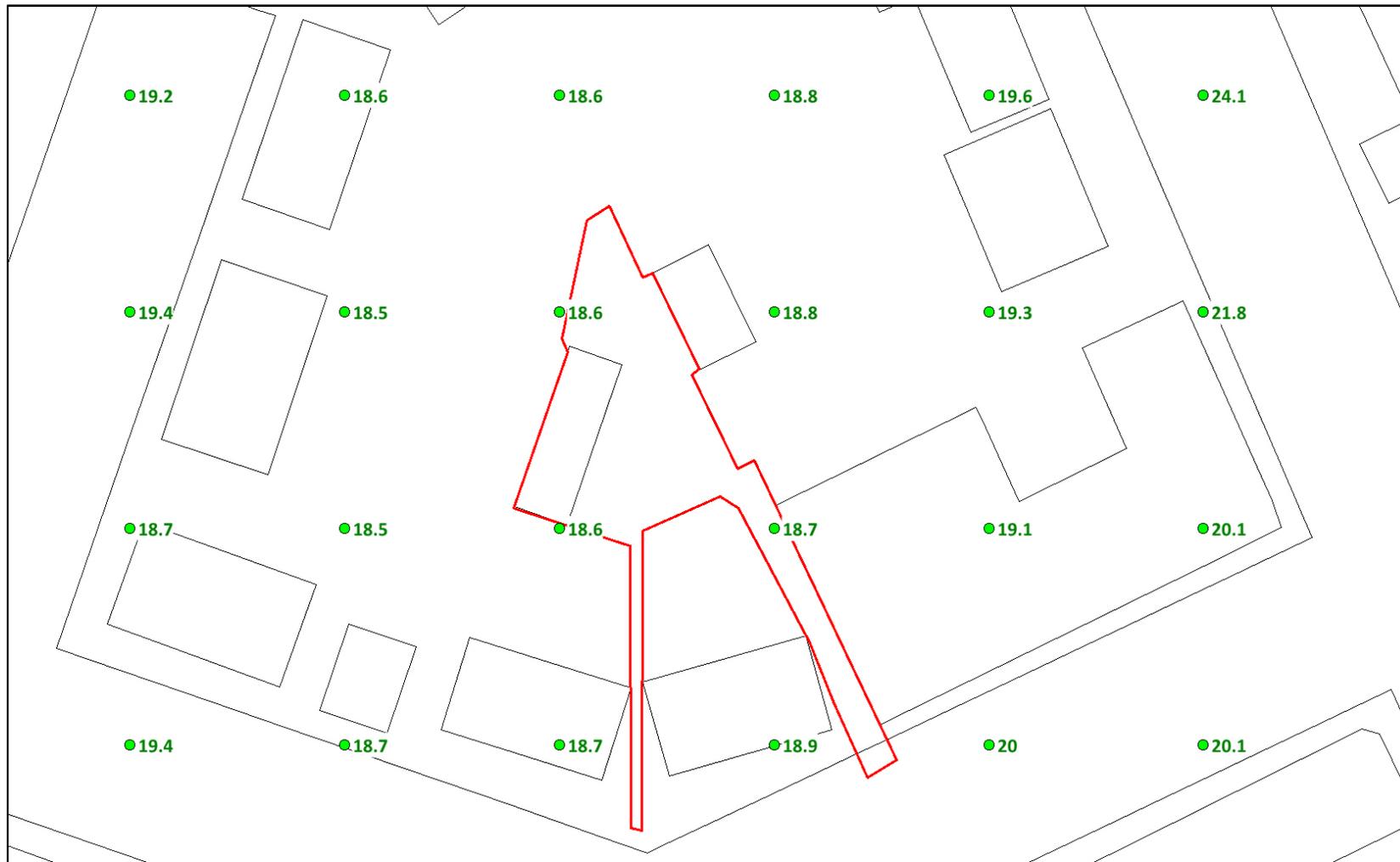


Figure 2 – LAEI Modelled Particulate (PM<sub>10</sub>) Concentrations (µg/m<sup>3</sup>), 2025

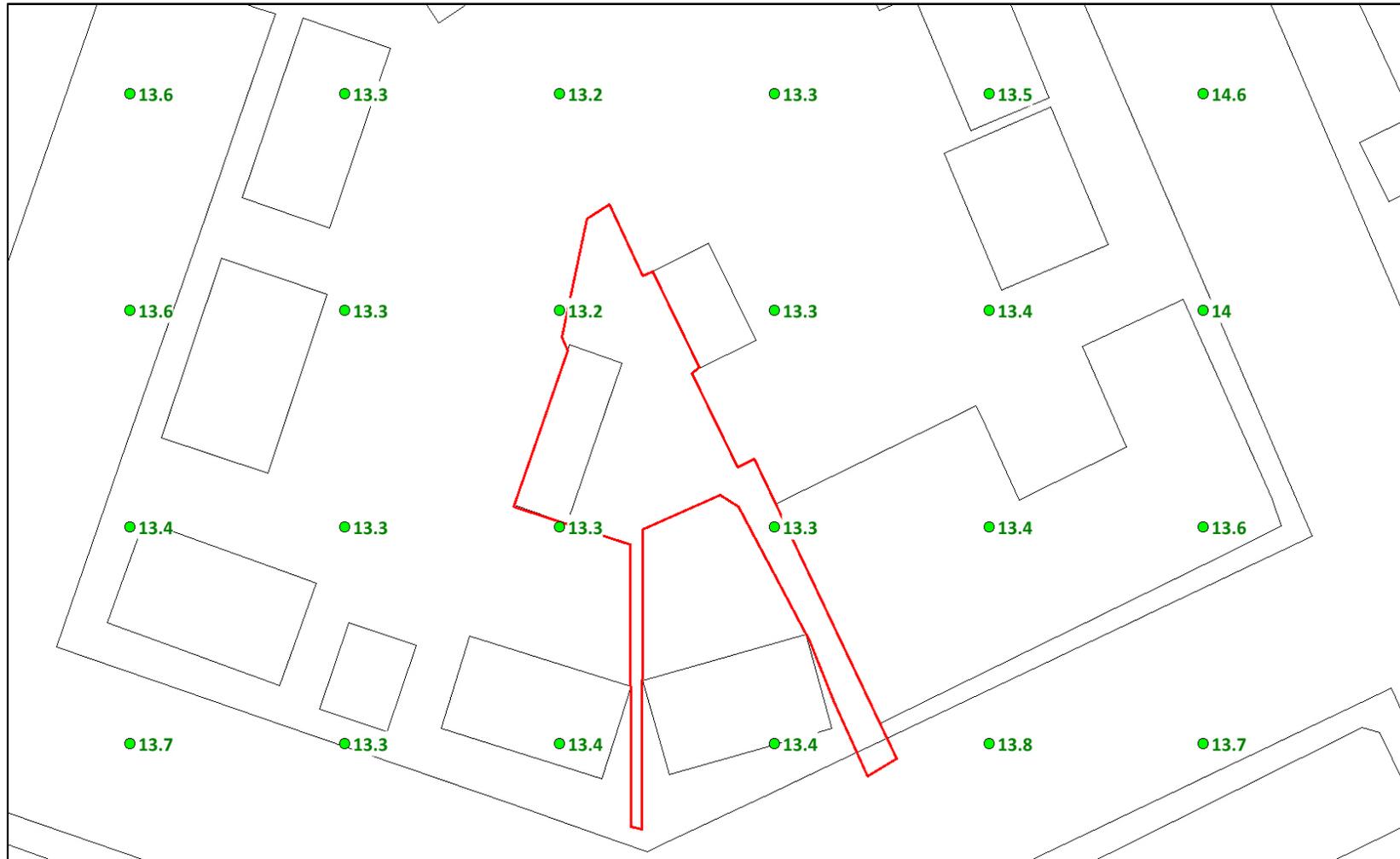
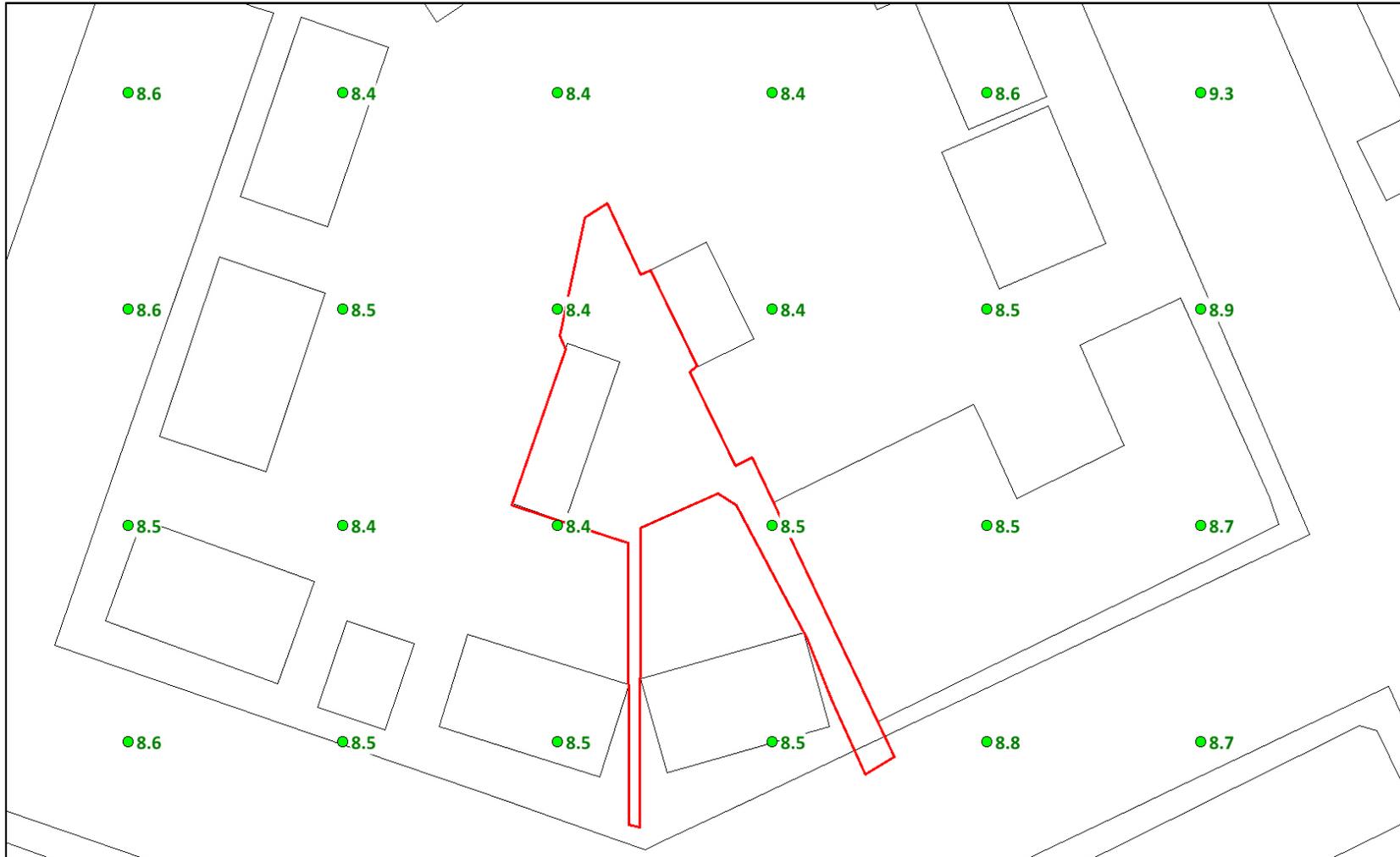


Figure 3 – LAEI Modelled Particulate (PM<sub>2.5</sub>) Concentrations (µg/m<sup>3</sup>), 2025



## 2 PLANNING POLICY & GUIDANCE

### 2.1 National Planning Policy & Guidance

#### 2.1.1 National Planning Policy Framework

On a national level, air quality can be a material consideration in planning decisions. The updated National Planning Policy Framework (NPPF) for England, released in December 2024, is considered a key part of the Governments reforms to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth.

Paragraph 110 within the NPPF states that the *“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”*.

It goes on to state in paragraph 199 that *“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”*.

#### 2.1.2 National Planning Practice Guidance (PPG)

The NPPF is supported by the National Planning Practice Guidance (PPG), which includes guiding principles on how planning can take account of the impacts of new development on air quality (updated November 2019). The PPG states that *“Defra carries out an annual national assessment of air quality using modelling and monitoring to determine compliance with EU Limit Values”* and *“It is important that the potential impact of new development on air quality is taken into account where the national assessment indicates that relevant limits have been exceeded or are near the limit”*. The role of the local authorities is covered by the LAQM regime, with the PPG stating that local authority Air Quality Action Plans *“identify measures that will be introduced in pursuit of the objectives”*. The PPG makes clear that *“Odour and dust can also be a planning concern, for example, because of the effect on local amenity”*.



The PPG also states that *“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”*.

The PPG sets out the information that may be required in an air quality assessment, making clear that *“Assessments need to be proportionate to the nature and scale of development proposed and the potential impacts (taking into account existing air quality conditions), and because of this are likely to be locationally specific”*. It also provides guidance on options for mitigating air quality impacts, as well as examples of the types of measures to be considered. It makes clear that *“Mitigation options will need to be locationally specific, will depend on the proposed development and need to be proportionate to the likely impact”*.

### 2.1.3 Land-Use Planning & Development Control

In January 2017, Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) produced guidance to ensure that air quality is adequately considered in the land-use planning and development control processes<sup>4</sup>.

The guidance document is particularly applicable to assessing the effect of changes in exposure of members of the public resulting from residential and mixed-use developments, especially those within urban areas where air quality is poorer. It is also relevant to other forms of development where a proposal could affect local air quality and for which no other guidance exists.

## 2.2 Regional Planning Policy

### 2.2.1 London Environment Strategy

The Mayor’s London Environment Strategy<sup>5</sup>, published in May 2018, contains a comprehensive list of measures to improve air quality. The aim is *“for London to have the best air quality of any major world city by 2050, going beyond legal requirements to protect human health and minimise inequalities”*.

The strategy includes setting new targets for PM<sub>2.5</sub> with the aim of meeting World Health Organization (WHO) guidelines by 2030, the establishment of zero emission zones from 2020, the introduction of an air quality positive development, the phasing out the use of fossil fuels

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<sup>4</sup> Land-Use Planning & Development Control: Planning for Air Quality. Guidance from Environmental Protection UK and the Institute of Air Quality Management for the consideration of air quality within the land-use planning and development control processes. EPUK & IAQM. January 2018

<sup>5</sup> London Environment Strategy. Mayor of London. May 2018



to heat, cool and maintain London's buildings and the introduction of a low emission zone for non-road mobile machinery (NRMM).

### 2.2.2 The London Plan

The most recent London Plan was published in March 2021. Policy SI1 relates specifically to air quality and states the following:

*"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 should demonstrate that design measures have been used to minimise exposure*

*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”.*

### 2.2.3 Supplementary Planning Guidance (SPG)

#### *Control of Dust and Emissions during Construction and Demolition SPG*

The Greater London Authority (GLA) released the “Control of Dust and Emissions during Construction and Demolition” SPG in July 2014<sup>6</sup>. The guidance seeks to reduce emissions of dust and PM<sub>10</sub> from construction and demolition activities in London. It also aims to manage emissions of nitrogen oxides (NOx) from construction and demolition machinery. The SPG:

- Provides more detailed guidance on the implementation of all relevant policies in the London Plan and the Mayor’s Air Quality Strategy to neighbourhoods, boroughs, developers, architects, consultants and any other parties involved in any aspect of the demolition and construction process;
- Sets out the methodology for assessing the air quality impacts of construction and demolition in London; and
- Identifies good practice for mitigating and managing air quality impacts that is relevant and achievable, with the overarching aim of protecting public health and the environment.

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<sup>6</sup> The Control of Dust and Emissions during Construction and Demolition SPG. Greater London Authority, July 2014



The principles of the SPG apply to all developments in London as their associated construction and demolition activity may all contribute to poor air quality unless properly managed and mitigated.

As stated in the SPG, the latest version of the Institute of Air Quality Management (IAQM) guidance should be used when undertaking an Air Quality Dust Risk Assessment (AQDRA). The latest IAQM guidance was released in January 2024<sup>7</sup> and has been used for the AQDRA within this air quality management plan.

### *Sustainable Design and Construction SPG*

The Greater London Authority (GLA) released the “Sustainable Design and Construction” SPG in July 2014<sup>8</sup>. The SPG aims to support developers, local planning authorities and neighbourhoods to achieve sustainable development. It provides guidance on to how to achieve the London Plan objectives effectively, supporting the Mayor’s aims for growth, including the delivery of housing and infrastructure.

## **2.3 Local Planning Policy**

### **2.3.1 Hillingdon Local Plan**

Policy EM8 “*Land, Water, Air and Noise*” of the Councils Local Plan: Part 1 - Strategic Policies (adopted November 2012) refers specifically to air quality and states the following:

*All development should not cause deterioration in the local air quality levels and should ensure the protection of both existing and new sensitive receptors.*

*All major development within the Air Quality Management Area (AQMA) should demonstrate air quality neutrality (no worsening of impacts) where appropriate; actively contribute to the promotion of sustainable transport measures such as vehicle charging points and the increased provision for vehicles with cleaner transport fuels; deliver increased planting through soft landscaping and living walls and roofs; and provide a management plan for ensuring air quality impacts can be kept to a minimum.*

*The Council seeks to reduce the levels of pollutants referred to in the Government’s National Air Quality Strategy and will have regard to the Mayor’s Air Quality Strategy.*

*London Boroughs should also take account of the findings of the Air Quality Review and Assessments and Actions plans, in particular where Air Quality Management Areas have been designated.*

*The Council has a network of Air Quality Monitoring stations but recognises that this can be widened to improve understanding of air quality impacts. The Council may therefore require*

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<sup>7</sup> IAQM Guidance on the assessment of dust from demolition and construction (January 2024, v2.2), Institute of Air Quality Management, London

<sup>8</sup> Sustainable Design and Construction SPG. Greater London Authority, July 2014



*new major development in an AQMA to fund additional air quality monitoring stations to assist in managing air quality improvements.*

Policy DME1 14 of the Councils Local Plan Part 2 - Development Management Policies also refers to air quality and states the following:

*A) Development proposals should demonstrate appropriate reductions in emissions to sustain compliance with and contribute towards meeting EU limit values and national air quality objectives for pollutants.*

*B) Development proposals should, as a minimum:*

*i) be at least "air quality neutral";*

*ii) include sufficient mitigation to ensure there is no unacceptable risk from air pollution to sensitive receptors, both existing and new; and*

*iii) actively contribute towards the improvement of air quality, especially within the Air Quality Management Area.*



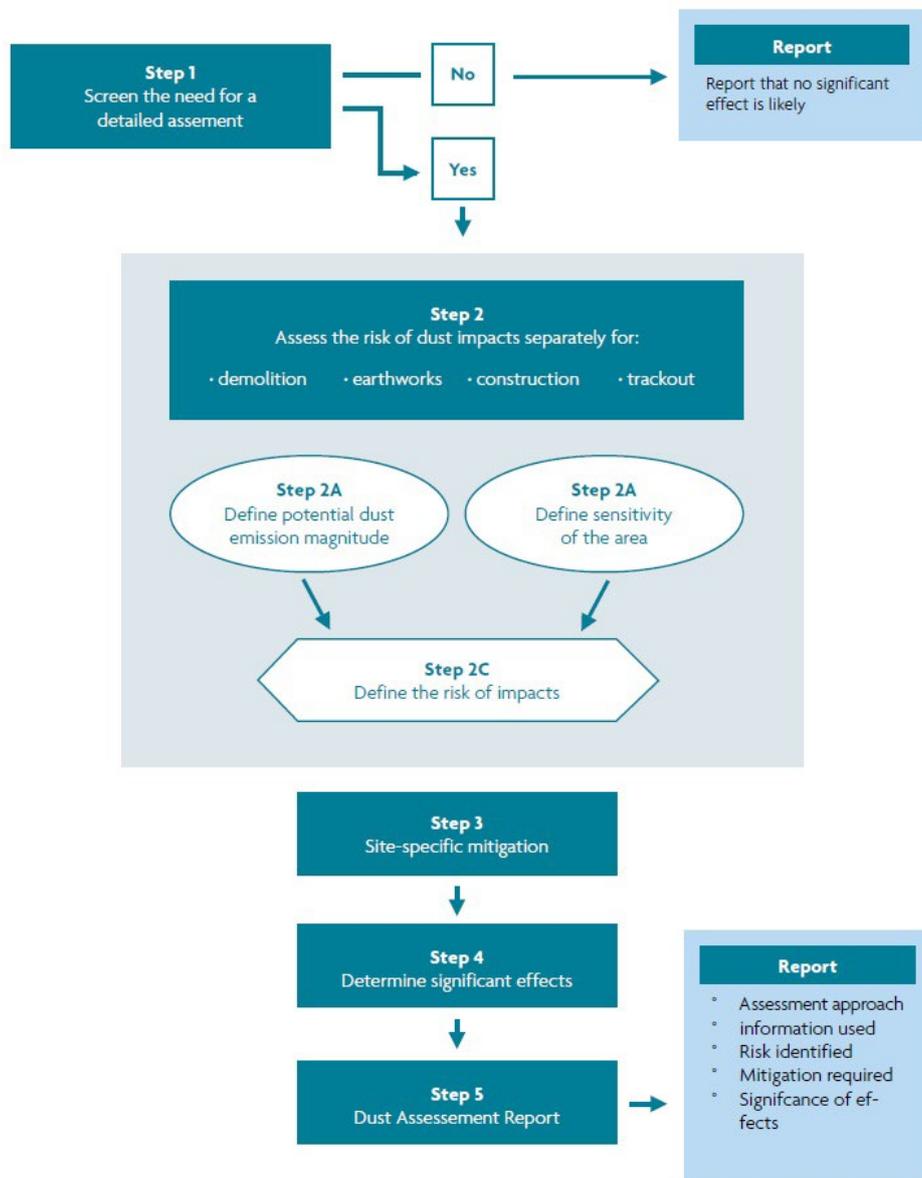
### 3 CONSTRUCTION PHASE

#### 3.1 Methodology

Using the guidance published by the GLA the potential for dust emissions to be generated during the construction phase has been assessed for each activity that is likely to take place.

The conditions with no mitigation thus form the baseline or “do-nothing” situation for a construction site. The assessment procedure uses the steps provided in the guidance and summarised in Figure 4.

Figure 4 – Dust Assessment Procedure



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 development is allocated to a risk category based on two factors:

- the scale and nature of the works, which determines the potential dust emission magnitude as small, medium or large (see Table 4); and
- the sensitivity of the area to dust impacts, which is defined as low, medium or high sensitivity (see Table 5 and 6).

These two factors are combined to determine the risk of dust impacts with no mitigation applied (see Table 7). The risk category assigned to the development can be different for each of the four potential activities (demolition, earthworks, construction and track out).

**Table 4 – Dust Emission Magnitude**

Activity	Dust Emission Class		
	Large	Medium	Small
<b>Demolition</b>	Total building volume >75,000 m <sup>3</sup> , potentially dusty construction material (e.g. concrete), on-site crushing and screening, demolition activities >12 m above ground level	Total building volume 12,000 – 75 000m <sup>3</sup> , potentially dusty construction material, demolition activities 6-12 m above ground level	Total building volume <12,000 m <sup>3</sup> , construction material with low potential for dust release (e.g. metal cladding or timber), demolition activities <6m above ground, demolition during wetter months
<b>Earthworks</b>	Total site area >110,000 m <sup>2</sup> , potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >6 m in height	Total site area 18,000 m <sup>2</sup> – 110,000 m <sup>2</sup> , moderately dusty soil type (e.g. silt), 5-10 heavy earth moving vehicles active at any one time, formation of bunds 3m - 6m in height	Total site area <18,000 m <sup>2</sup> , soil type with large grain size (e.g. sand), <5 heavy earth moving vehicles active at any one time, formation of bunds <3 m in height
<b>Construction</b>	Total building volume >75,000 m <sup>3</sup> , piling, on site concrete batching; sandblasting	Total building volume 12,000 m <sup>3</sup> – 75,000 m <sup>3</sup> , potentially dusty construction material (e.g. concrete), on site concrete batching	Total building volume <12,000 m <sup>3</sup> , construction material with low potential for dust release (e.g. metal cladding or timber)
<b>Track out</b>	>50 HDV (>3.5t) outward movements in any one day, potentially dusty surface material (e.g. high clay content), unpaved road length >100 m	20-50 HDV (>3.5t) outward movements in any one day, moderately dusty surface material (e.g. high clay content), unpaved road length 50 m – 100 m	<20 HDV (>3.5t) outward movements in any one day, surface material with low potential for dust release, unpaved road length <50 m



**Table 5 – Sensitivity of the Area to Dust Soiling Effects on People and Property**

Sensitivity of the Area to Dust Soiling Effects					
Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		<20	<50	<100	<350
High	>100	High	High	Medium	Low
	10-100	High	Medium	Low	Low
	1-10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

**Table 6 – Sensitivity of the Area to Human Health Impacts**

Sensitivity of the Area to Human Health Effects							
Receptor Sensitivity	Annual Mean PM <sub>10</sub> Concentration	Number of Receptors	Distance from the Source (m)				
			<20	<50	<100	<200	<350
High	>32 µg/m <sup>3</sup>	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	28-32 µg/m <sup>3</sup>	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	24-28 µg/m <sup>3</sup>	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<24 µg/m <sup>3</sup>	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium	-	>10	High	Medium	Low	Low	Low
	-	1-10	Medium	Low	Low	Low	Low
Low	-	>1	Low	Low	Low	Low	Low

**Table 7 – Risk of Dust Impacts**

Construction Activity	Sensitivity of Area	Dust Emission Magnitude		
		Large	Medium	Small
Demolition	High	High Risk	Medium Risk	Medium Risk
	Medium	High Risk	Medium Risk	Low Risk
	Low	Medium Risk	Low Risk	Negligible
Earthworks	High	High Risk	Medium Risk	Low Risk
	Medium	Medium Risk	Medium Risk	Low Risk
	Low	Low Risk	Low Risk	Negligible
Construction	High	High Risk	Medium Risk	Low Risk
	Medium	Medium Risk	Medium Risk	Low Risk
	Low	Low Risk	Low Risk	Negligible
Track out	High	High Risk	Low Risk	Low Risk
	Medium	Medium Risk	Low Risk	Negligible
	Low	Low Risk	Low Risk	Negligible



### 3.2 Construction Impact Assessment

The assessment of construction activities has focused on demolition, earthworks, construction and track out activities at the site. Using the criteria provided in Table 4 the dust emission magnitude for each activity is as follows:

- Demolition = Small (Total building volume <12,000 m<sup>3</sup>);
- Earthworks = Small (Total site area <18,000 m<sup>2</sup>);
- Construction = Small (Total building volume <12,000 m<sup>3</sup>); and
- Track out = Small (<20 HDV (>3.5t) outward movements in any one day).

The sensitivity of the surrounding area to dust soiling and human health (Table 8) is then defined based on the criteria in Table 5 and 6, which includes the number of highly sensitive receptors that fall within a certain distance of the proposed construction phase (see Figure 5).

**Table 8 – Overall Sensitivity of the Surrounding Area**

Potential Impact	Sensitivity of the Surrounding Area			
	Demolition	Earthworks	Construction	Track out
Dust Soiling	Medium	Medium	Medium	Medium
Human Health	Low	Low	Low	Low

The dust emission magnitudes and sensitivity of the surrounding area are combined to determine the risk of dust impacts with no mitigation applied. These are summarised in Table 9.

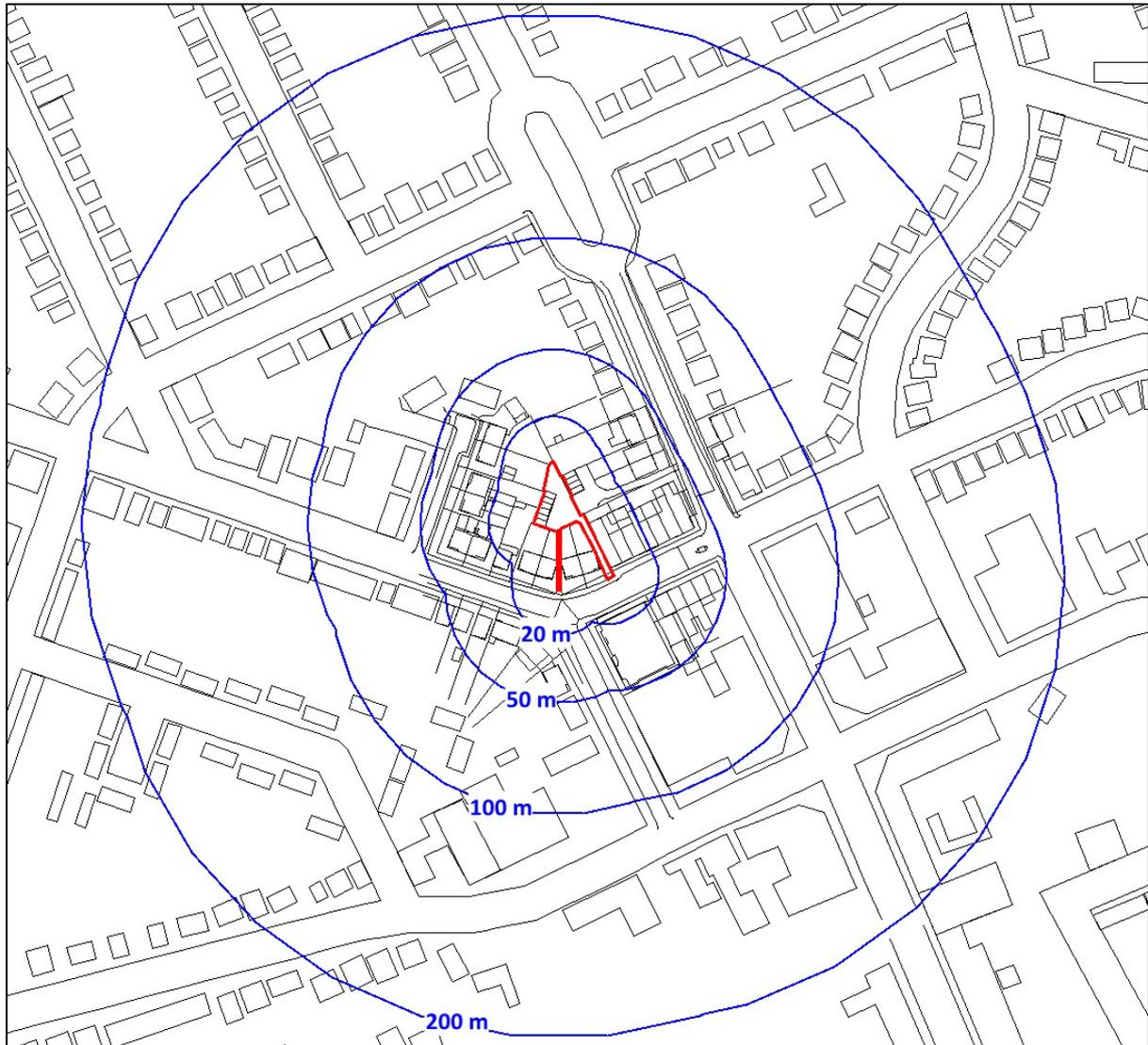
**Table 9 – Summary of Dust Risk**

Potential Impact	Risk			
	Demolition	Earthworks	Construction	Track out
Dust Soiling	Low Risk	Low Risk	Low Risk	Negligible
Human Health	Negligible	Negligible	Negligible	Negligible

It should also be noted that the likelihood of an adverse impact occurring is correlated to wind speed and wind direction. As such, unfavourable wind speeds and wind directions must occur at the same time as a dust generating activity to generate an adverse impact. The overall impacts also assume that the dust generating activities are occurring over the entirety of the site meaning that as an activity moves further away from a potential receptor the magnitude and significance of the impact will be further reduced.



**Figure 5 – Distance from the Proposed Development**



## 4 AIR QUALITY NEUTRAL ASSESSMENT

### 4.1 Introduction

The air quality neutral assessment has followed the methodology outlined in the Air Quality Neutral guidance<sup>9</sup>. Within the guidance benchmarks have been provided in relation to building and transport emissions, together with a methodology for calculating the building and transport related emissions for a particular development.

### 4.2 Transport Emissions

Where minor developments include new parking, they can be assumed to meet the Transport Emission Benchmarks (TEB) if the maximum parking standards set out in policies T6 and T6.1 to T6.5 of the London Plan are not exceeded.

The proposed development will meet the relevant parking standards for a single dwelling. As such, the proposed development is considered air quality neutral in relation to the transport emissions.

### 4.3 Building Emissions

Where minor developments include new heating systems, they can be assumed to meet the Building Emission Benchmarks (BEB) if:

- the new heating system is a heat pump or other zero-emission heat source;
- the new heating system is a gas boiler with NO<sub>x</sub> emissions rated at less than 40 mg/kWh;  
or
- the development is connecting to an existing heat network.

Heating and hot water will be provided using heat pumps or gas boilers with NO<sub>x</sub> emissions rated at less than 40 mg/kWh. As such, the proposed development is considered air quality neutral in relation to the building emissions.

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<sup>9</sup> London Plan Guidance: Air Quality Neutral. GLA, February 2023



## 5 MITIGATION MEASURES

### 5.1 Construction Phase

A qualitative assessment of dust levels associated with the proposed development has been carried out. The impact of dust soiling and PM<sub>10</sub> can be reduced to negligible through appropriate mitigation measures, which are listed in Table 10 and are applicable to a low-risk site. Implementation of these Best Practice Measures will help reduce the impact of the construction activities.

With these mitigation measures enforced, the likelihood of nuisance dust episodes occurring at those receptors adjacent to the development are considered low. Notwithstanding this, the developer should take into account the potential impact of air quality and dust on occupational exposure standards (in order to minimise worker exposure) and breaches of air quality objectives that may occur outside the site boundary. Monitoring is not recommended at this stage, however, continuous visual assessment of the site should be undertaken and a complaints log maintained in order to determine the origin of a particular dust nuisance. Keeping an accurate and up to date complaints log will isolate particular site activities to a nuisance dust episode and help prevent it from reoccurring in the future.

### 5.2 Operational Phase

Based on the evidence provided in Section 1.1 there is no need to consider building mitigation (e.g. mechanical ventilation) or a ventilation strategy in relation to air quality.

In accordance with the London Plan and appropriate Building Regulations, one active electric vehicle charging point (EVCP) will be provided.

### 5.3 Air Quality Neutral Assessment

The air quality neutral statement has concluded that the proposed development will meet building and transport emission benchmarks. As such, no additional mitigation measures are required to reduce these emissions.



**Table 10 – Mitigation of Construction Activities**

<b>Construction Activity</b>	<b>Mitigation Measures</b>
<b>Site Management</b>	Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary.
	Display the head or regional office contact information.
	Record and respond to all dust and air quality pollutant emissions complaints.
	Make a complaints log available to the local authority when asked.
	Carry out regular site inspections to monitor compliance with air quality and dust control procedures, record inspection results, and make an inspection log available to the local authority when asked.
	Increase the frequency of site inspections by those accountable for dust and air quality pollutant emissions issues when activities with a high potential to produce dust and emissions and dust are being carried out, and during prolonged dry or windy conditions.
	Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and the action taken to resolve the situation is recorded in the log book.
<b>Preparing and Maintaining the Site</b>	Plan site layout: machinery and dust causing activities should be located away from receptors.
	Erect solid screens or barriers around dust activities or the site boundary that are, at least, as high as any stockpiles on site.
	Avoid site runoff of water or mud.
<b>Operating Vehicle/Machinery and Sustainable Travel</b>	Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone.
	Ensure all non-road mobile machinery (NRMM) comply with the relevant standards.
	Ensure all vehicles switch off engines when stationary – no idling vehicles.
	Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where possible.
	Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).
<b>Operations</b>	Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
	Ensure an adequate water supply on the site for effective dust/particulate matter mitigation (using recycled water where possible).
	Use enclosed chutes, conveyors and covered skips.
	Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
<b>Waste Management</b>	Reuse and recycle waste to reduce dust from waste materials
	Avoid bonfires and burning of waste materials.



## 6 CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Air Quality Management Plan

The air quality management plan has concluded that the current proposals are considered acceptable in terms of the potential air quality impacts. Mitigation measures have been recommended in relation to the construction phase and operational phase (air quality neutrality).

The development complies with Policy EM8 of the Councils Local Plan.

